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AN ASSESSMENT OF PLANNING - PROGRAMMING - BUDGETING - EVALUATING SYSTEMS IN EDUCATION

A Report Presented to
The Education Planning Mission,
Human Resources Research Council

By

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CHAPTER I

DESCRIPTION OF PROJECT

I. INTRODUCTION AND FRAME OF REFERENCE OF PROJECT

Problem

Developments in Alberta and elsewhere suggest that PPBES and its variants may play an increasingly significant role in decision making about various aspects of education. Although much has been written about PPBES, and although some school districts have attempted to implement it, very little is known about the extent to which adoption has actually taken place, the relative effectiveness of alternative strategies of implementation, or the effectiveness of the procedures once they have been implemented. The general purpose of this study was to investigate these neglected areas of research. The study had four specific objectives:

(1) to develop a general model to assist in the identification and assessment of the processes and components of PPBES;

(2) to operationalize the model in interview schedule form and apply it in selected school districts which have implemented PPBES;

(3) to present a description of PPBES as observed in several school districts;

(4) to outline some strategies of implementation as observed in the school districts visited.

This report contains material on each of the four objectives. The model and interview schedule developed should prove useful in the evaluation of PPBES procedures being implemented by school districts in Alberta.

Six sub-objectives of study were identified:

(1) to develop a better appreciation of the evaluation component in PPBES for use in Alberta school systems and by provincial authorities;

(2) to determine the constraints involved in implementation of PPBES;

(3) to ascertain the degree of success that other jurisdictions have attained in implementing PPBES;

(4) to identify criteria by which a PPBE System may be evaluated;

(5) to identify the types of criteria by which educational programs in a PPBE System were evaluated;

(6) to determine the usefulness and relevance to decision-makers, at both the local and provincial levels, of the information produced by a PPBES information system.

The results of the study should be useful to Alberta educational decision-makers in several ways:

(1) in the evaluation of presently operational program accounting and budgeting project;

(2) in the assessment of the question of province-wide implementation of the program accounting and budgeting phase of PPBES;

(3) in the assessment of the feasibility of attaining a fully-operational PPBE System at the local level;

(4) in the assessment of PPBES as a decision system to improve instructional programs and pupil learning.

Procedures

This study was a joint undertaking of the Education Planning Mission of the Human Resources Research Council, and the PPBES Project of the Department of Education. The general direction of the study was determined by a committee which had the following membership: William Duke (Chairman), Gerald Hawley, Christine Lomas and John Myroon of the PPBES Project; John Hudson and Erwin Miklos of HRRC; and Carl Daneliuk of the Edmonton Public School Board. Various aspects of the study were carried out by subcommittees formed from the membership of the general committee, augmented by individuals with expertise in particular areas.

The first task undertaken by the committee was the development of a conceptual framework, from which an evaluation design ultimately emerged. The literature on evaluation was reviewed, a tentative model -- an integrated evaluation and PPBES model -- developed, and a questionnaire designed within this framework.

Committee members, in pairs, visited four U.S. school systems which have implemented PPBES to varying degrees: Clark County, Nevada; Saugus and Torrance School Districts, California; and Dade County, Florida Committee feedback sessions were held after these visits to review the suitability of the questionnaire and the general design selected. In addition, a subcommittee of the general committee met with the members of a sister project of the Education Planning Mission dealing with the evaluation of instructional programs. The purpose of this meeting was to obtain an outside reaction to the design and questionnaire from persons highly knowledgeable in the area of evaluation in education.

Following completion of the visits, each visiting team prepared the reports which constitute the major part of this paper.

2. PPBES EVALUATION DESIGN

The evaluation design used in this study is a two-dimensional integration and adaptation of Stufflebeam's evaluation model[1] and Haggart's[2] major components of PPBES (Figure 1).

Stufflebeam's evaluation model comprises one dimension of the total design and focuses on the collection of information for decision making. Stufflebeam outlines four types of evaluation: context, input, process, and product (CIPP).

Context evaluation relates to the situation in which something occurs, for example, sociological factors such as the school, the home, and the community. Information about the environment is provided in order to help focus on the basic unmet needs, set priorities, and determine the direction that the PPBE System should take.

Input evaluation relates to the physical and human resources needed to implement and maintain an operation at a level commensurate with specified objectives. Input evaluation looks at "What goes in" to the PPBE System.

Process evaluation attempts to detect or predict, during the implementation stages, defects in the procedural design. The overall strategy is one of continuously identifying and monitoring the potential source of failure in the PPBE System. Information can be collected daily or at short intervals,

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[1] Daniel L. Stufflebeam, "Toward a Science of Educational Evaluation." Educational Technology, 1968, 8.

[2] Sue A. Haggart et al., Program Budgeting for School District Planning: Concepts and Applications. Rand Corporation, RM-6116-RC, November, 1969.

	CIPP Evaluation Variables (Stufflebeam)			
PPBES Components (Haggart)	Context	Input	Process	Output
A. PPBES Overall	X[1]	X	X	X
B. Structure:				
1. Goal Definition	X	X	X	X
2. Operational Objectives		X	X	X
3. Program Structure	X	X		X
4. Criteria Development			X	X
5. Activities (Programs)	X		X	X
6. Up-Dating			X	
C. Analytic:				
1. Identifying Alternatives	X	X	X	
2. Resource Determination		X	X	
3. Benefit Estimation			X	X
4. Decision Criteria			X	X
5. Evaluation of Alternatives		X	X	X
D. Information Base				
1. Design of Accounting System		X	X	X
2. Information Retrieval			X	
3. Type of Information	X	X		X
4. Type of Reports			X	X
5. Monitoring		X	X	X

FIGURE I: A Two-Dimensional Evaluation Matrix

and organized and analyzed periodically. Process evaluation is concerned with methodology or "How is it done?"

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[1] Indicates areas of potential questions in the interview schedule.

Product or output evaluation is used to determine the effectiveness of the PPBE System after it has run its full cycle or an identifiable portion of it. The products of the system are assessed in terms of the goals held for it. Product evaluation asks the question "What comes out of the PPBE System?"

The second dimension of the evaluative design is an adaptation of Haggart's major components of a PPBE System: overall factors, structure or format, analysis and control, and data or information system components.

The overall category has been added to provide a broad perspective for assessing some aspects of PPBES. It refers to those pieces of information which cover all three of the major components. For example, the political climate, past and present, is a contextual variable relating to this general category. In the conduct of the interview schedule the "overall" questions are asked first.

In the structural aspect of PPBE Systems, the goals of the educational organization are considered of prime importance. A goal, which can be defined as a statement of broad direction, general purpose, or intent, derives from an assessment of need. Goals represent the desire of a community in the educational arena thereby giving direction to the school system's operations.

Performance objectives are a finer specification of general goals, that is, a restatement, clarification, quantification, and further definition, of goals statements. An objective, then, is a desired accomplishment measured quantitatively and/or qualitatively for a given time under specifiable conditions.

The activities of an educational enterprise are related to its goals and objectives by a program structure. A program structure is a classification plan showing the hierarchical arrangement of programs within an institution, indicating the interrelationship of the activities of the system in terms of functions, programs, and sub-programs, and their relationships to the organization's goals and objectives. Since goal statements are an expression of values, the program structure is an implicit statement of values reflecting the priorities of those responsible for the school system. The PPBES processes of planning and programming are emphasized in this component.

Analysis refers to the various study activities conducted within the framework of the structural aspects of the school system or institution. The analytical aspect has two main thrusts: a descriptive thrust which identifies and isolates the on-going activities in the organization and concrete manifestations of what is happening; a predictive component which generates and then assists in the selection of alternative courses of action in terms of utility and cost, with a view to clarifying the relevant choices open to decision-makers seeking to attain specific objectives. Although the results of analysis do not dictate the choices to be made, they serve to sharpen the intuition and judgement of decision makers.

Surrounding and entwined in the analytical component of PPBES is the evaluation function. Formative evaluation is on-going evaluation which incrementally affects the pursuit of an objective or weights the choice of an alternative course of action. Summative evaluation attempts to assess the anticipated or measured outcomes of a course of action in relation to

CHAPTER II

PPBES IN FOUR SELECTED SCHOOL DISTRICTS

In late February and early March 1971 members of the project team made a two-three day visit in pairs to one of the four selected school districts in the U.S. which are involved in implementing PPBES. These districts, each considered to be a leader in the PPBED field, and ranging in size by pupil enrollment from 4,500 to 250,000, were: the Saugus and Torrance School Districts in California; Clark County, Nevada; and Dade County, Florida. The purpose of each visit was to discuss various aspects of implementing PPBES with members of the district staff in order to develop a description of an operating PPBE System, to refine the previously developed PPBES questionnaire, and to identify some considerations for implementing PPBES. The PPBES evaluation questionnaire in its final form constitutes Appendix A of this report and some important considerations concerned in implementing PPBES are discussed in Chapter III. The purpose of this part of the report is to describe briefly the PPBE Systems which are being implemented in the school districts visited in terms of the four main components used in the questionnaire, e.g., "overall," structure, analysis, and information base. A more detailed description of the PPBE System in each of the four school districts is contained in Appendices B-E respectively of this report.

PPBES "Overall"

Each of the school districts visited have had at least two years' experience in implementing PPBES. It is interesting to note that each of

(2) that PPBES is one type of "in-house" mechanism for making an organization more responsive to change, and leading to a higher level of efficiency and effectiveness.

(3) that time constraints, coupled with the embryonic state of developments in PPBES, negated the initial expectation of developing evaluative criteria translatable through interval-type data;

(4) that any serious use of the interview-schedule developed requires interviewers that are knowledgeable about the PPBES concept and the implementation of it, and further, that the major purpose of this instrument will be descriptive in nature, enabling a relative comparison between an operational "is" situation with a conceptualized "ought" situation;

(5) that it is unlikely that most interviewees could respond to all the questions. The interviewer must tailor to varying degrees the questions pursued, depending on the orientation of the interviewee;

implementation plans. The Saugus School District has made the greatest progress in implementing a complete PPBE System; no doubt its small size and homogeneity have greatly assisted this. The Torrance School District has plans to implement all aspects of PPBES eventually but so far is involved only in developing goals and objectives for its instructional and non-instructional programs. Both Clark and Dade Counties view PPBES simply as a management and planning tool and at present have no plans for implementing a full PPBE System.

The extent to which a school district plans to implement all aspects of PPBES seems to be an important factor in determining the degree to which teachers, administrators, and members of the public are involved in decisions concerning PPBES. In both the Saugus and Torrance School Districts, where the ultimate goal is implementation of the complete PPBES concept, there has been extensive and meaningful involvement of teachers and the general public from the outset. In Clark and Dade Counties however, both of which have a narrower conception of PPBES, there has been little or no involvement of persons from outside the central office. Even within the central office involvement in these two districts has been largely confined to staff from the business management divisions.

Structure

The structural component of a PPBE System in a school district is concerned with the goals and objectives of the school district and the activities and programs for achieving these stated goals and objectives. The activities are in turn related to the goals and the districts visited was participating or had participated in a PPBES pilot project. Clark and Dade counties had both been members of a project being directed by the Association of School Business Officials. On the other hand Saugus and Torrance are at present participating in a project which is under the auspices of the California State Legislature's Advisory Commission on School District Budgeting and Accounting. As a result of participating in a pilot project, each school district received a small grant and in addition Saugus and Torrance benefit from the expertise of project staff and consultants, as well as from the experiences of other project districts.

Non-economic rather than economic factors appear to have played a much more important part in the school district's decision to become involved in PPBES. In each case the decision was greatly influenced by a strong commitment to the PPBES concept by certain key central office personnel. Furthermore, in both Clark and Dade counties, PPBES was a natural outcome of their previous work with management by objectives and responsibility-center budgeting respectively.

Although in each district a core of senior staff with a commitment to PPBES was identified, in no district except Dade County are there persons with full-time duties in PPBES. In each district therefore it appears that PPBES is being implemented by re-deploying existing staff rather than by recruiting new staff. In Dade County a coordinator and two assistants were appointed to direct the implementation of PPBES in the school district.

All four school districts differ widely in the extent to which they have already implemented PPBES and in terms of their future implementation plans. The Saugus School District has made the greatest progress in implementing a complete PPBE System; no doubt its small size and homogeneity have greatly assisted this. The Torrance School District has plans to implement all aspects of PPBES eventually but so far is involved only in developing goals and objectives for its instructional and non-instructional programs. Both Clark and Dade Counties view PPBES simply as a management and planning tool and at present have no plans for implementing a full PPBE System.

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Structure

The structural component of a PPBE System in a school district is concerned with the goals and objectives of the school district and the activities and programs for achieving these stated goals and objectives. The activities are in turn related to the goals and objectives by means of a program structure. Both the Saugus and Torrance School Districts have developed very general district goals and have involved administrators, teachers, students and the general public in the process. In each case it is significant to note the extent to which the goal statement reflects the philosophy and values of people in the school district. In these districts too, much work has already been done in developing goals and performance objectives for both the instructional and non-instructional programs.

A distinctive feature of the work of developing of goals and objectives in these two districts have been the carefully planned in-service training which has been given to all those involved in the process. In general the initial in-service training sessions were directed by central office personnel, sometimes with the assistance of outside consultants. The teachers and administrators who were involved in these early sessions, have since been responsible for in-servicing their colleagues as the degree of involvement in PPBES has increased. At the present time in the Torrance School District provision is made for all teachers to receive four half-days of in-service training with PPBES each year.

Whereas Saugus and Torrance are concerned with developing goals and objectives for all activities of the school district, Clark and Dade are concerned with only some of the school district's activities. Clark has developed a set of goals and performance objectives for all the activities and programs within the Division of Business and Finance but has not concerned itself at all with the instructional program. In Dade County on the other hand, whereas goals and objectives are being [illegible] for [illegible] the institutional and instructional programs, at the present time work is proceeding only on a pilot basis. In both districts, because of the more limited nature of the project, there is considerably less participation in these activities by personnel outside the school district office.

The program structure in both Saugus and Torrance is an adaptation of the one developed for use by districts participating in the California PPBES pilot project. It describes all the activities of each district, is curriculum based and has a hierarchical structure with six levels. The Dade County program structure has four levels and is a description of present activities in the school district. The Clark County program structure has two levels and a service-performed type of orientation. It is significant to note that only the Saugus School District has developed a program accounting system using its program structure.

Analysis

Whereas all four districts are working to varying degrees on the structural component of PPBIS, at the present time all of them appear to be extremely weak concerning the analytical component. However all districts indicated their intention to develop this component much more in future. The analytical component is concerned with identifying the ongoing activities of the district, generating and selecting alternative courses of action in terms of utility and cost, and finally evaluating the activities selected in terms of how well they achieve stated objectives. It therefore emphasizes the budgeting and evaluative aspects of PPBIS.

None of the districts visited is involved in an accurate costing of programs and activities. At the present time much greater emphasis is placed on identifying existing programs rather than on generating, costing, and evaluating alternative ways of achieving stated objectives. The budgeting aspect of the analytical component is therefore very weak. On the other hand with the exception of Torrance, which as yet has not begun to implement the analytical component of PPBES, all districts are involved in monitoring and evaluating their existing programs and activities. For example, although not tied in with the PPBE System, Dade County has a well-developed program evaluation department which monitors on-going programs and is responsible for administering system-wide standardized tests in areas such as Mathematics and Reading. In the Saugus School District programs are evaluated annually by the Superintendent and a team of teachers who travel from school to school.

Information Base

A well-developed information base is essential for any successful PPBE System, since without it no effective analysis and evaluation of programs is possible. The extensiveness and sophistication of the information base of each of the school districts visited, however, varied considerably. Clark and Dade Counties have well-developed information systems computerized to a very high degree of sophistication. Their data base includes statistics on pupils, program, personnel, facilities-usage, community profile, and accounting. The Torrance School District similarly has a well-developed, fairly comprehensive, data base. The Saugus School District, on the other hand, is only beginning to develop a comprehensive information base and consequently it is deficient in a number of important areas. It is significant to note that, in the main, the information base was in existence prior to PPBES being implemented. In most cases however it seems to function quite independently of the PPBE System.

If a school district is to develop and maintain a comprehensive information base it is necessary for it to have a computer of its own or to have access to one. Each of the districts, except Saugus, has its own computer with varying capability and capacity. Since Saugus is a relatively small district however it finds it more economical to use the services of a data processing firm.

Conclusion

In spite of the fact that the four districts visited are considered to be leaders in the PPBES field at the present time, not one of them has yet implemented a fully operational PPBE System. Only the Saugus School District, perhaps because of its smallness, has been able to implement most of the components of such a system. Nevertheless because each district began at a different point in the PPBES implementation cycle, it is possible on the basis of the information gained from all four districts to obtain a reasonably comprehensive picture of an operational PPBE System.

CHAPTER III

IMPLEMENTING PPBES: SOME CONSIDERATIONS

When considering implementation of PPBES in a school system, it is important that a carefully organized implementation plan be developed. To this end, there are several key decisions which must be made with respect to the way in which implementation should proceed. For each of these decisions there are alternatives. Which alternatives best suit a particular system depend in part upon the size of the system, its organizational structure, and the internal and external political climate. In all cases, however, certain questions have to be answered if effective implementation is to occur. Some of the more important questions are listed below. In certain cases, a very brief description of some of the possible alternatives is given. The questions have been grouped into six categories: general, planning, programming, budgeting, analysis and evaluation.

General

At what point in the cycle should a system begin to implement PPBES?

A PPBE System constitutes an iterative process involving planning, programming, budgeting, analysing, deciding and evaluation. Since the PPBES concept involves a cyclical process, it should be possible to begin implementation at any point. However, in general, implementation activities have been commenced at one of two points in the cycle. Advocates of the prescriptive approach start at the planning and programming portion of the cycle. This approach stresses activities such as goal definition and determination of instructional objectives first. Advocates of the descriptive approach favor starting with the programming, budgeting, and analysis phase. Such phases emphasize processes such as program description and program accounting. In any case, the complete cycle must be made before a fully operating PPBE System exists.

Who should be involved in PPBES?

Since PPBES represents a systems approach to educational decision-making, it would seem that most system personnel should ultimately be involved. The extent to which involvement occurs will vary according to levels of the organization and functions within levels. Certainly top management personnel must become involved and committed to PPBES before satisfactory implementation can occur. Some approach whereby key educational and business personnel become involved at appropriate stages of implementation must also be considered. The nature and degree of involvement at any particular phase of the implementation plan will be influenced by the point in the PPBE cycle at which implementation commences.

What provisions must be made for providing in-service training to the following groups?

(a) Teachers
(b) Support Staff
(c) Central Level Administrators
(d) Trustees
(e) Public

Who should handle the design and implementation of the PPBE System?

(a) An outside consulting firm

(b) System personnel on an "in-house" basis

(c) A combination of the above. If so, for which aspects would (a) be used, and (b) be used?

When implementing PPBES on a pilot basis should a school system involve:

(a) All schools over all program areas?

(b) All schools over selected program areas?

(c) Selected schools over all program areas?

(d) Selected schools over selected program areas?

What time line should be established for the implementation of PPBES?

Planning

What mechanism should be created for the planning activities in PPBES?

(a) A task force (on an *ad hoc* basis)

(b) A central planning group (permanent)

(c) Tasks assigned within the existing organization framework

Who should be involved in the planning regarding the following:

(a) Overall system goals, objectives, and activities?

(b) PPBES implementation?

With respect to program planning:

(a) How are the objectives of programs to be determined?

(b) How does one ensure compatibility between individual program and system goals and objectives?

(c) Is there a need for a written statement of goals and objectives for the system? For each program? If so, to what level of detail?

At what level in the system is the multi-year planning process initiated?

By what techniques are decisions made?

(a) Committee

(b) Specification by administrators

(c) Other (specify)

Programming

How should the program structure for the system be developed?

(a) By reference to present practice in other systems as described in available materials

(b) By a process of program definition which is tied in with the setting of goals and objectives

Who should determine what constitutes a program within the system?

(a) The superintendent or other central office administrators

(b) Principals of schools, department heads, and other school level administrators

(c) Teachers within specialty areas

(d) A combination of the above

How should program definition be accomplished?

(a) By a committee or task force responsible for the total program

(b) By a committee of specialists for each of the curricular or support areas concerned

(c) By compilation of individual program descriptions from the school level or equivalent

Budgeting

To what level of the total program structure should budgeting occur on a system-wide basis?

What budget cycle is to be used for:

(a) Long-range budgeting?

(b) Short-range budgeting?

How should budget cycles (e.g., long-range, short-range) be related to the instructional cycles in the system? E.g., in a semestered school should budgeting be done on a semester basis?

To what degree should the budget be decentralized? What type of responsibility centers should exist?

What relationship (if any) should exist between budget appropriations and the accounting classification?

Analysis

Analysis is closely related to evaluation. An attempt has been made to restrict this section to considerations other than those related to evaluation, which are dealt with in the next section.

What type of information must be available if analysis is to be effectively accomplished?

Who should do the analysis?

Should a program accounting system be developed? How closely must the accounting system relate to the program structure?

What type of monitoring system should be used to determine when the PPBES program structure, information base, or accounting system needs updating?

(a) A periodic review

(b) A continuous "maintenance" program

(c) Other (specify)

What system of reporting should be established? What type of reports should be produced? Who receives the reports? How often are the reports produced?

Evaluation

How should the system determine whether or not the objectives defined for programs are effective in the fulfillment of system goals?

How should the system determine whether or not objectives for programs are being attained?

Who should develop evaluative criteria for programs?

(a) Central office administrators

(b) School level personnel

(c) External evaluators

(d) Combinations of the above

What mechanism should be used in the development of evaluative criteria for programs?

(a) Committee

(b) Task force

(c) Specified by upper level administrators

(d) Other (specify)

What system of monitoring programs should be developed? Who should be responsible for evaluation of programs?

What kind of evaluative "cycle" should be established? Should evaluations be carried out on a regular basis or on an "as required" basis? If the latter, who should decide when program evaluation is required?

What evaluative procedures should be employed in evaluating the FPEE System itself? Should this be done internally, externally, or both ways?

If student progress is one of the evaluative criteria used for the evaluation of programs, how should this be determined and who should be consulted?

(a) External evaluators

(b) Teachers

(c) Students

(d) Other (specify)

What provision should exist for replacing and updating of the system in terms of objectives, evaluative criteria, and evaluative techniques? Who decides when updating is required?

SUMMARY AND CONCLUSION

The preceding questions have been posed in an attempt to highlight some of the issues which face any school system attempting to implement PPBES. Several different approaches have been attempted, as evidenced by previous sections of this report. No one method of implementation appears to be innately superior to the other. The success of any implementation plan will depend to a large extent on the commitment of system personnel to the concepts involved, the effectiveness of the orientation and in-service program within the system, and the leadership and administrative capability of those directly concerned with implementation.

Different approaches will be useful in different districts. The size of the system, the political climate, and the resources available for development will in part determine the constraints affecting PPBES implementation.

While it is recognized that this presentation has raised questions for which no answers have been provided, it is hoped that the issues identified will provide guidelines with respect to the determination of considerations which a particular system must explore in order to achieve an effective implementation of an operating PPBE System.

Appendix F contains several sample "implementation plans." These may provide some guidelines for those systems considering implementation of PPBES. They are intended as illustrations only, not as recommended procedures. These plans have been developed by groups associated with the National Academy for School Executive clinics in program budgeting.

BIBLIOGRAPHY

Section 1. PPBES - Education

BLAUG, Mark, "Approaches to Educational Planning," *Economic Journal*, June, 1967, V. 77, pp. 262-287.

BOYER, E. Gill, "PPBES: As a Tool for Recording Data for Better Education Legislation," *Leadership for Education: Proceedings of the National Conference of State Legislators*, December 4-6, 1966, pp. 69-72.

COOK, Desmond L., *Program Evaluations and Review Technique (PERT), Applications in Education.* Cooperative Research Monograph No. 17, OE12024, U.S. Department of Health, Education, and Welfare, Office of Education.

EDDING, Friedrich, *Methods of Analyzing Educational Outlay.* UNESCO Publications Center, 319 E. 34th Street, New York, N.Y., 10016, 1966.

FISHER, G.H., *The World of Program Budgeting.* Rand Corporation, P-3361, May, 1966.

GIBBS, Wesley, F., "Program Budgeting Filters Down to Education," *Nation's Schools*, V. 82, No. 5, Novermber, 1968, pp. 51-53.

HAGGART, Sue A., Barro, Stephen M, Carpenter, Margaret B., Dei Rossi, James A., and Rapp, Marjorie L., *Program Budgeting for School District Planning: Concepts and Applications.* Rand Corporation, RM-6116-RC, November, 1969.

HAGGART, Sue A., *The Program Structuring Aspect of PPB for Education.* Transcript of Material used at a PPBES Clinic.

HARTLEY, Harry J., *Educational Planning - Programming - Budgeting: A Systems Approach.* Englewood Cliffs, N.J.: Prentice-Hall, 1968.

JUDY, Richard W., *Systems Analysis for Efficient Resource Allocation in Higher Education.* A research progress report, Institute for the Quantitiative Analysis of Social and Economic Policy, University of Toronto, January, 1970.

JUNGHERR, J.A., *Can Small School Districts Use a Planning - Programming - Budget System.* Paper presented at the New York State Business Officials Annual Meeting, May 21, 1968.

KERSHAW, J.A. and McKean, R.N., *Systems Analysis and Education.* Rand Corporation, RM-2473-FF, October, 1959.

KNEZEVICH, Stephen J., (ed), *Administrative Technology and the School Executive*. American Association of School Administrators, Washington, D.C., 1969.

LEVINE, Donald M., *The Emergence of the Planning, Programming, Budgeting, Evaluation System (PPBES) as a Decision and Control Technique for Education*. Research Corporation of the Association of School Business Officials.

RATH, Gustave J., "PPBS is More Than a Budget: It's a Total Planning Process," *Nation's Schools*, Vo. 82, No. 5, November, 1968, pp. 53-55.

WILLIAMS, Harry, *Planning for Effective Resource Allocation in Universities*. American Council on Education, 1785 Massachusetts Avenue, Washington D.C., 20036, 1966.

WILKINSON, Bruce W., *Studies in the Economics of Education*. Ottawa: Queen's Printer, Economics and Research Branch, Department of Labor, Canada, Occasional Paper No. 4, 1965.

Section 2. Evaluation in Education: Objectives, Inputs, Processes and Outcomes

ABRAMSON, David A., "Curriculum research and evaluation." *Review of Educational Research*, 1966, *36*, 168-85.

ALKIN, M.C., *Evaluating the Cost-Effectiveness of Instructional Programs.* Report No. 25, Los Angeles: Center for the Study of Evaluation of Instructional Programs (CSEIP), University of California, May, 1969.

__________, *Towards and Evaluation Model: A Systems Approach.* Working Paper No. 4, Los Angeles: Center for the Study of Evaluation of Instructional Programs (CSEIP), University of California, August, 1967.

AAAS Commission on Science Education, *An Evaluation Model and Its Application.* Washington, D.C.: American Association for the Advancement of Science, Publication 65/9, 1965.

BLOOM, B.S. *Toward a Theory of Testing Which Includes Measurement -- Evaluation -- Assessment.* Report No. 19, Los Angeles: Center for the Study of Evaluation of Instructional Programs (CSEIP), University of California, October, 1968.

BLOOM, B.S., (Ed.), Englehart, M.D., Furst, E.J., Hill, W.H., and Krathwohl, D.R., "A Taxonomy of Educational Objectives Handbook I, the Cognitive Domain" New York: Longman Green, Co., 1956.

BRUNER, Jerome S., *Toward a Theory of Instruction.* Cambridge: Harvard University Press, 1966.

CALDWELL, Michael S., "Input Evaluation and Educational Planning." The Ohio State University Evaluation Center, 1968.

DYER, Henry S., "The Pennsylvania Plan," *Science Education*, 50:3, April, 1966.

FIRMAN, W.D., "The Quality Measurement Project," *Science Education*, 50:3, April, 1966.

FOREHAND, Garlie A., "The Role of the Evaluator in Curriculum Research." *Journal of Educational Measurement*, 1966, *6*, pp. 199-204.

GAGNÉ, Robert M., "The Analysis of instructional objectives for the design of instruction" in *Teaching Machines and Programmed Learning II: Data and Directions*, Glaser, Robert M. (ed.), Washington, D.C.:

GLASER, R., *Evaluation of Instruction and Changing Educational Models.* Report No. 13. Center for the Study of Evaluation of Instructional Programs (CSEIP), Los Angeles: University of California, September, 1968.

GLASS, Gene V., *Two Generations of Evaluation Models*. Paper presented to the Nebraska Personnel and Guidance Association, Lincoln, Nebraska, 20, September, 1968.

______________, *The Growth of Evaluation Methodology*. Boulder Colo: University of Colorado Laboratory of Experimental Design. (Mimeo) 1969.

GOODMAN, Samuel M., *The Assessment of School Quality*. New York: The University of the State of New York, State Education Department, 1969.

GUBA, Egon G., "The Failure of Educational Evaluation," *Educational Technology*, IX, 5, May, 1969.

GUBA, Egon G. and Stufflebeam, Daniel L., Evaluation: *The Process of Stimulating, Aiding and Abetting Insightful Action*. Address delivered to the second Symposium for Professors of Educational Research. Boulder, Colo., November 21, 1968.

HAMMOND, Robert L., "Context Evaluation of Instruction in Local School Districts." Vol. IX, No. 1, pp. 13-18.

KAPFER, Philip G., "Behavioral Objectives in the Cognitive and Affective Domains." *Educational Technology*, June 15, 1968.

KERSHAW, Joseph A. and McKean, Ronald N., *Systems Analysis and Education*. Santa Monica, California: The Rand Corporation, 1959.

KRATHWOHL, David R., Bloom, Benjamin S. and Masia, Bertram B., "Taxonomy of Educational Objectives, Handbook II: Affective Domain," New York: David McKay Company, Inc., 1964.

LORTIE, Dan., *The Cracked Cake of Educational Customs and Emerging Issues in Evaluation*. Report No. 19, Center for the Study of Evaluation of Instructional Programs (CSEIP), Los Angeles: University of California, September, 1968.

LIEBERMAN, Myron (ed.), "Eight Articles on Accountability," *Phi Delta Kappan*, LII:4, December, 1970.

MERRIMAN, Howard O., "Evaluation of Planned Educational Change at the Local Education Agency Level." The Ohio State University Evaluation Center, 1967.

MESSICK, S., *The Criterion Problem in the Evaluation of Instruction*. Report No. 22, Center for the Study of Evaluation of Instructional Programs (CSEIP), Los Angeles: University of California, May, 1969.

METFESSEL, N.S. and Michael, William B., *A Paradigm Involving Multiple Criterion Measures for the Evaluation of the Effectiveness of School Programs*. Paper presented at the annual meeting of the American Educational Research Association, New York, February 16, 1967.

MIKLOS, Erwin (ed.), Evaluation: An Administrative Function. Proceedings at Banff Regional Conference, 1964, Department of Educational Administration, University of Alberta, Edmonton.

MILLER, Richard I., "A Comprehensive Model for PACE Project Management." Educational Product Report, 1969, 2, pp. 30-35.

OTT, Jack M., "Classification System for Decision Situations: An Aid to Educational Planning and Evaluation." Vol. IX, No. 2, pp. 20-23.

OWENS, Thomas R., "Suggested Tasks and Roles of Evaluation Specialists in Education." Vol. VIII, No. 22, pp. 2-10.

PACE, Robert C., Evaluation Perspectives: 1968. Report No. 8, Center for the Study of Evaluation of Instructional Programs (CSEIP), Los Angeles: University of California, January, 1969.

PROVUS, Malcolm, "Evaluation of Ongoing Programs in the Public School System," in Educational Evaluation: New Roles, New Means. Sixty-eighth Yearbook, Part II, Chicago: The National Society for the Study of Education, 1969 (a).

SCRIVEN, Michael, "The Methodology of Evaluation." In Stake, Robert E. (ed.). AERA Monograph Series on Evaluation, No. 1, Chicago: Rand McNally, 1967, pp. 39-89.

STAKE, Robert E. (ed.), AREA Monograph Series on Curriculum Evaluation, No. 1. Chicago: Rand McNally, 1967.

______________, "The Countenance of Educational Evaluation," Teachers College Record, Columbia University, New York, April, 1967.

STUFFLEBEAM, Daniel L., "A Depth Study of the Evaluation Requirement," Theory into Practice, V(3), The Ohio State University, June, 1966.

______________, Evaluation as Enlightenment for Decision-making. Columbus: Evaluation Center, Ohio State University (1712 Neil Avenue), 1968.

______________, "Toward a Science of Educational Evaluation." Educational Technology, 1968, 8.

STUFFLEBEAM, Daniel L. and Westerlund, Stuart R., "The Evaluation of Context, Input, Process and Product in Elementary and Secondary Education." A report written for the Bureau of Elementary and Secondary Education, U.S. Office of Education, 1967.

SUCHMAN, Edward A., Evaluative Research, New York: Russell Sage Foundation, 1967.

TABA, Hilda and Sawin, E., "A Proposed Model in Evaluation." Education Leadership, 1962, 20, pp. 57-71.

TAYLOR, Peter A. and Maguire, Thomas O., "A Theoretical Evaluation Model." Manitoba Journal of Educational Research, 1966, 1, pp. 12-21.

TROW, Martin, Methodological Problems in the Evaluation of Innovation. Center for the Study of Evaluation, University of California at Los Angeles. Pub. 31, May, 1969.

TYLER, Ralph W., "Assessing the Progress of Education," Science Education, 50:3, April, 1966.

The Way to Relevance and Accountability. A Report of the Joint Committee on Educational Goals and Evaluation, May, 1970, California Legislature.

WALBESSER, Henry H., "Curriculum Evaluation by Means of Behavioral Objectives." Journal of Research in Science Teaching, 1963, 1, pp. 296-301.

WILEY, David E., "The Design and Analysis of Evaluation Studies." Center for the Study of Evaluation, University of California at Los Angeles. Pub. 28, May, 1969.

WITTROCK, M.C., The Experiment in Research on Evaluation of Instruction. Working Paper No. 2, Los Angeles: The Center for the Study of Evaluation of Instructional Programs (CSEIP), University of California, December, 1966.

WORTHEN, Blaine R., "Toward a Taxonomy of Evaluation Designs," Educational Technology, August 15, 1968.

WORTHEN, Blaine R., et al., "Evaluation of a Process for Selecting and Resting Educational Innovations." A report to the Xenia Center for Educational Programming, Title III, The Elementary and Secondary Education Act of 1965. The Ohio State University Evaluation Center, 1969.

APPENDIX A

PPBES EVALUATION QUESTIONNAIRE

A. PPBES OVERALL

1. What was the political climate in terms of the commitment of upper-level decision-makers at the provincial level? At the local level?

2. In what ways did the need for PPBES at the local level manifest itself? Where did the ideas originate within the total context?

3. Was PPBES a choice among other alternatives? If so, what were the other alternatives (e.g., humanistic approach, performance contracting, market mechanism, management by objectives, etc.)? Why was PPBES chosen?

4. Is there a core group of persons that have a full-time commitment to PPBES? What is the size of this group?

5. What is the basis of funding for the project?
   (a) locally funded
   (b) provincial grants
   (c) federal grants

6. Was the PPBE System implemented on a pilot basis? If not, on what basis was it implemented (e.g., a total school program or parts of it only)?

7. What were the constraints which influenced the implementation of PPBES? (Give both restraining and facilitating influences).

8. Has the implementation of PPBES been fully completed? Is there a long-term plan? Which of the following areas does the school system intend to pursue?
   (a) goals and objectives
   (b) analytic aspects
   (c) evaluative aspects
   (d) control aspects
   (e) organizational structure, e.g., regular involvement of referent groups

9. Which of the following referent groups were directly involved in the establishment and implementation of PPBES? Indirectly?
   (a) teachers
   (b) principals
   (c) parents
   (d) students
   (e) administrators
   (f) politicians
   (g) boards of education

10. What method(s) of communication is used between and among the above groups?
    - (a) newsletter
    - (b) periodic reports
    - (c) seminars
    - (d) hearings
    - (e) other (specify)

11. Is in-service given to any of the above groups? Which ones? Is there any provision for feedback from these groups? Are revisions made as a result of this feedback?

12. Were the goals of the PPBE System specified? (If no, go to Question 16). How were they specified? Who was involved?

13. Were goal priorities for the PPBE System specified? (If no, go to Question 16). How were they specified? Who was involved?

14. To what degree does the school system feel that it is meeting the specified goals?

15. Have the goal priorities changed during operation of the PPBE System? How? Why?

16. Has the PPBE System been evaluated? What indicated the need for evaluation? What method of evaluation was used? Who participated in the evaluation? What effect did this evaluation have, e.g., was the system recycled?

B. STRUCTURE

GOALS

1. What are the characteristics of the school district which may have influenced the definition of goals, objectives, and the program structure?

2. Have goals been defined? (If no, go to next section, Objectives).

3. Is there a written statement of goals?

4. Are the goals comprehensive, i.e., do they cover all activities of the school district?

5. Which groups were involved in definition of goals? How were these groups selected? What input did each group make? What approach was taken? How long did it take to define goals?

6. Which came first, goal definition or program structure? Why was this approach taken?

7. Have goal priorities been defined? What approach was used? Which groups were involved? What characteristics of the school district influenced the goal priorities?

8. To what extent are goals specified at the school and/or classroom level?

9. Have the goals or goal priorities changed? If so, was this the result of analysis? How often have they changed? What process is involved in the change?

OBJECTIVES

1. Have performance objectives been specified for each goal? (If no, go to next section).

2. By what process were these performance objectives determined? Which groups were involved?

3. Were those involved in the definition of performance objectives given in-service training? Was there any provision for feedback from those involved in these activities? Were revisions make in light of the feedback?

PROGRAM STRUCTURE

1. Has a program structure been developed? (If no, go to next section). Which groups were involved?

2. Upon which of the following variables is the program structure organized?
   (a) curriculum based
   (b) pupil route
   (c) target group
   (d) responsibility center
   (e) other (specify)

3. Does the program structure describe all activities? Does it have a hierarchical arrangement? How many levels are there?

4. Has the program structure undergone change? Is the current program structure relatively stable?

5. Has an accounting system been established using the program structure?

C. ANALYSIS

IDENTIFICATION OF ALTERNATIVES

1. Are alternatives identified at any of the following levels? (If no to all sections, go to section D - Information Base).
   (a) alternatives to system goals
   (b) alternatives in capital planning

(c) alternatives to objectives at school level
(d) alternative processes
(e) alternatives between and within programs

2. What kinds of information were used for generating alternatives?

3. Which groups were involved in generating alternatives?

4. When alternatives are considered, is the planning and analytic cycle longer than one year?

5. To what extent and in what fashion does the process of identifying alternatives result in re-examination and modification of goals and objectives?

COSTING OF ALTERNATIVES

1. Are alternatives costed? (If no, go to next section). By whom?

2. What processes or methods are used for costing alternatives in the following areas?
   (a) capital projects
   (b) new instructional programs
   (c) different processes for on-going instructional programs

3. If costs are projected into the future, what is the basis for doing so, e.g., are they discounted? What assumptions are made about projected costs?

EFFECTIVENESS OF ALTERNATIVES

1. Have the stated alternatives been examined on the basis of effectiveness? (If no, go to next section).

2. By what method and by whom are effectiveness criteria for alternatives developed?
   (a) for new programs
   (b) after implementation of a program

3. What kinds of effectiveness criteria are developed, e.g., program size indicators, quantitative output measures, qualitative output measures?

4. To what extent do the criteria measure the effectiveness of corresponding objectives? Has an external auditor evaluated the criteria in this respect?

5. To what extent does the determining of the effectiveness of alternatives lead to a restating of these alternatives, creation of new alternatives, and/or combinations of alternatives?

SELECTING AN ALTERNATIVE

1. What groups are involved in determining decision rules for and making decisions on alternatives at the following levels?
   (a) classroom level
   (b) school level
   (c) system level

2. How are decision rules formulated?

3. What methods are used in evaluating alternatives? Cost-effectiveness? Other types of analysis?

4. Are qualitative as well as quantitative cost factors taken into account, e.g., non-dollar costs?

5. What information other than cost and effectiveness data is considered in deciding upon an alternative, e.g., pedagological, political, etc.?

MONITORING OF PROGRAMS

1. Are on-going programs evaluated? (If no, go to next section). Which ones?

2. What groups are involved in evaluation of on-going programs?

3. To what extent have indicators been developed for on-going programs? Which indicators show a need for re-examination of a program?

4. Are on-going programs ever compared to similar programs in other school districts? If so, what factors are taken into account? Costs? If so, are costs comparable across school districts?

5. What process is used in the evaluation of on-going programs?

6. How do the results of such evaluations influence those programs?

D. INFORMATION BASE

1. Was the data base deficient upon entry into PPBES? If yes, in which areas?
   (a) needs definition
   (b) goals and objectives determination
   (c) alternatives
   (d) program information
   (e) cost structure
   (f) control
   (g) analysis
   (h) evaluation

2. Does the data base include statistics on:
    (a) pupils (tests, drop-out rate, abilities, socio-economic)
    (b) programs (goals, objectives, evaluative criteria, results)
    (c) personnel qualifications and assignments (payroll)
    (d) facilities usage (maintenance and operation costs)
    (e) community profile (demographic, ethnic, economic)

3. Which groups determined what information was to be included in the data base?

4. Does the information system contain data on constraints? Cost constraints? Others?

5. Is there a planned periodic collection of both fiscal and educational data to up-date files?

6. Was consideration given to the cost (feasibility study) of collecting data at various levels of detail? If so, how?

7. What type of information is used for:
    (a) achievement control (output oriented)?
    (b) resource control (input oriented)?

8. Does the information system supply quantitative or qualitative data (or both) for analysis?

9. Does the system use program accounting? (If no, go to Question 15).

10. Does the information system provide actual costs in program areas? What types of data are produced? How are they used to portray the interdependencies between dollar costs, program description, and resource requirements?

11. What types of pro-ration statistics are used to allocate dollar costs between and among programs? What method, if any, is used to allocate salary costs to instructional programs?

12. To what extent does the coding and accounting system limit the type of reports the system is capable of producing? Does the program accounting system dictate the hardware used in accounting?

13. What type of coding system is used to facilitate data retrieval? Does it identify costs by program, object of expenditure, responsibility center, etc.?

14. What type of accounting is used, e.g., cash, depreciation, accrual, encumbrance, etc.?

15. Is the accounting system flexible enough to demonstrate various aggregations other than the one to which it is oriented?

16. Are reports prepared on the following? If so, what form do they take?
    (a) estimated and actual performance
    (b) progress of programs
    (c) problem areas
    (d) degree of achievement of objectives
    (e) evaluation of programs
    (f) responsibility center costs
    (g) budget reports
    (h) other (specify)

17. Of the above reports, what types are received by:
    (a) upper level of administration?
    (b) middle level of administration?
    (c) principals of schools?
    (d) teachers?
    (e) curriculum specialists?

18. How is the need for this information determined at these levels? Who determined these information needs?

19. What provision is made for feedback into the system following the receipt of reports?

20. Has the information produced by the PPBE System been of use to various levels of decision makers? What types of output are most useful? Least useful?

21. Is responsibility-center budgeting used? Do reports generated within the responsibility-center follow the program structure?

22. Are the budgeting and planning cycles the same? How long? Are budget figures derived from planning documents? If not, how are they determined?

23. Are the school year and the fiscal year the same? If different, how does the accounting system handle this? Are reports and budgets available for each?

24. Do provincial and federal reporting requirements present any serious problems to the PPBES reporting system?

25. Does the province operate a central or regional information retrieval service? Are there any indicators that the new information generated locally is of any use to provincial and federal authorities?

APPENDIX B

THE CLARK COUNTY SCHOOL DISTRICT

OVERALL

The Clark County School District, encompassing southern Nevada, includes one large urban centre, several small urban centres, and a few rural areas. A large proportion of the district's 74,000 students, both white and negro, are concentrated in the large urban centre of Las Vegas.

The current educational climate in the school district is characterized by: integration difficulties, a curriculum decentralized to the classroom level, extensive security measures, a complex bussing problem, and a massive food services program - milk, breakfast, and lunch.

Some seven years ago at a time when the school district was encountering financial difficulty, a number of senior administrators were hired to deal with the situation. The senior business administrator who was appointed at that time introduced the 'management by objectives' approach within the district's business and finanacial division. Later, the district obtained a small grant from the Association of School Business Officials (A.S.B.O.) to participate in a project for developing a PPBE System. The project was developed by the business and financial division for their programs and, to date, has not involved the educational division. This lack of commitment by the educational people is probably due to their current preoccupation with the very serious problems that face the district.

GOALS

Goals for each division of the school district were defined through the efforts of individual department heads in consultation with their staffs, and by committee work involving the department heads and the division head.

OBJECTIVES

Objectives of a specific and behavioral nature were defined for each of the specified programs. These objectives were set, by and large, by the individual department heads after all the department heads in committee reacted to the objectives initially submitted by an individual department head. Each program has a broad objective and several specific objectives. The objectives were evaluated and deemed appropriate by the censensus of the committee of department heads and division head.

PROGRAM STRUCTURE

The program structure describes all existing programs within each of the departments of the Division of Business and Finance: Financial Services, Supplies and Equipment, Data Processing, Accounting, Purchasing and Warehousing, Transportation, and Food Services. A service-performed type of orientation formed the basis for a program structure with two hierarchical levels: a division level and a department level within the division. Although the program structure is very stable and would lend itself to a program accounting system, nothing has been done yet in that direction. The program structure, as with goals and objectives, is experientially based and oriented toward a "management by objectives" operation.

ANALYSIS

At least one alternative demanded by the division head was generated by each department on the assumption that there would be more or less resources available. The estimates for the alternatives as well as the programs were generated by the department heads, utilizing their background of experience.

MONITORING OF PROGRAMS

Evaluative criteria were established for all programs and alternatives, and programs regularly monitored for effectiveness in relation to the criteria. However, alternatives were not attempted and hence no evaluation was possible.

INFORMATION BASE

The system developed and continues to develop an extensive data base independent of the PPBES operation. Most of this base is computerized to an extraordinarily high degree of sophistication. The data base includes statistics on pupils, program, personnel, facilties usuage, community profile, and accounting.

An accrual accounting system is used but it is not related to the program structure defined for PPBES. Budgeting is done on a partial responsibility centered basis on a three-year term. The fiscal year is identical to the school year.

CONCLUSION

In general, Clark County has limited its PPBES development to program definition, goal and objective setting, and budget estimation for the departments within the Division of Business and Finance. The information base, the accounting system, and the educational division have not been integrated into the PPBE System. Because the personnel have just completed the task of program definition, no evaluation or recycling has been possible. (Please refer to the Addendum to this Appendix for illustrative materials on Clark County.)

CLARK COUNTY

Business Division

PROGRAM STRUCTURE

Function	Program
1. BUSINESS & FINANCE	1. Business Division Services
	2. Financial Management
	3. Management by Objectives
	4. Reporting System
	5. Communications
	6. Assessment
2. ACCOUNTING	1. General (Non-Federal)
	2. General (Federal)
	3. Payroll
	4. Accounts Payable
	5. Pupil Accounting - Attendance Systems
	6. Pupil Accounting - Federal Survey
	7. Investments
	8. Internal Audit - School Banker Assistance
	9. Internal Audit - Audits
3. DATA PROCESSING	1. Student Attendance & Accounting System
	2. Student Progress
	3. Fiscal Accounting
	4. Inventory Accounting
	5. Computer Program Conversion
4. FINANCIAL SERVICES	1. Budgeting
	2. Budgeting - PPBS
	3. Insurance
	4. Bonding
5. FOOD SERVICES	1. Luncheteria A La Carte
	2. School Lunch Type "A"
	3. Sack Lunch Type "A"
	4. Breakfast

Function	Program
6. PURCHASING	1. Purchasing
	2. Warehouse
	3. Inventory Management
	4. Film Library and Mail Delivery
7. SUPPLIES AND EQUIPMENT	1. Communications - Telephone
	2. Communications - Radio
	3. Management of Instructional Equipment
	4. Equipping New Schools and Facilities
	5. Instructional Specifications
	6. Standardization
8. TRANSPORTATION	1. Regular Student
	2. Special Education Student
	3. Instructional and Athletic Trips
	4. Support Services

CLARK COUNTY SCHOOL DISTRICT
Las Vegas, Nevada

DEPARTMENT Purchasing

DATE July, 1970

PROGRAM: Purchasing Function

Broad Objective

The purchase of all instructional supplies, textbooks, library books, maintenance supplies, transportation supplies, cafeteria supplies, educational equipment and services used within the District.

Specific Objective

All purchases will be made in accordance with State laws and Board of Trustees policy.
To secure the best quality merchandise for the dollars expended.
To service our customers in an expedient manner.
Costs to produce purchase orders will be held within acceptable limits.

Services

Conduct pre-bid conferences.
Issue formal and informal bids.
Review specifications.
Issue purchase orders
Issue recommendations of award to Board of Trustees.
Issue change orders.
Expedite materials.
Close out of purchase orders.
Process over, short and damage reports.
Secure competition.
Conduct bid openings.
Insert newspaper advertisements for bids.

Evaluation

Buyers' purchasing files will be reviewed for compliance of State laws and Board policy - a 10% sampling of each buyer's procurement action will be reviewed on a weekly basis.
Specifications on materials purchased will be continually updated. Samples of volume purchases will be tested at random on a 5% basis.
Customer requisitions will be processed into purchase orders within one week after receipt in the Purchasing Department. Exceptions will be those requisitions that require processing through informal or formal bid procedures; however, these will be processed within 45 days after receipt in the Purchasing Department.
The costs to produce a purchase order will not exceed $3.25.

	1970-71			1971-72		1972-73	
Resources	% of Time	Number of Persons	Cost	Number of Persons	Cost	Number of Persons	Cost
Director	25	1	$ 4,626	1	$ 4,857	1	$ 5,080
Assistant Director	20	1	2,904	1	3,049	1	3,200
Buyers	100	5	59,422	7	81,170	8	93,650
Clerical	100	9	57,880	9	60,774	11	77,986
Rental Equipment			9,900		12,000		15,000
Supplies and Misc. Expense			9,400		11,000		13,000
Equipment					2,000		
Budget Program Costs		16	$144,132	18	$174,850	21	$207,916
Equipment (Invested Cost)			5,000		5,000		7,000
Total Program Costs		16	$149,132	18	$179,850	21	$214,916

DEPARTMENT Purchasing

CLARK COUNTY SCHOOL DISTRICT
Las Vegas, Nevada

DATE July, 1970

PROGRAM: Purchasing Function

ALTERNATIVE

Broad Objective

The purchase of all instructional supplies, textbooks, library books, maintenance supplies, transportation supplies, cafeteria supplies, educational equipment and services used within the District.

Specific Objective

All purchases will be made in accordance with State laws and Board of Trustees policy.
To secure the best quality merchandise for the dollars expended.
To service our customers in an expedient manner.
Costs to produce purchase orders will be held within acceptable limits.

Services

Limited expediting.
Limited program for close-out of purchase orders.
Secure competitive bids.
Conduct bid openings.
Issue recommendations of award to Board of Trustees.
Issue purchase orders.

Evaluation

Customer requisitions will be processed within 30 days after receipt in the Purchasing Department.
Exceptions will be those requisitions that require processing through informal or formal bid procedures.
These will be processed in 60 days.
2% sampling of buyers' purchase orders for compliance to the law.
The cost to produce a purchase order will not exceed $8.25.

A savings of 42% could be effected by lengthening the processing time for customer requisitions by three weeks and reducing the sampling of buyers purchase orders for compliance to the law by 8%.

	1970-71			1971-72		1972-73	
Resources	% of Time	Number of Persons	Cost	Number of Persons	Cost	Number of Persons	Cost
Director	25	1	$ 4,626	1	$ 4,857	1	$ 5,080
Assistant Director	20	1	2,904	0	-0-	0	-0-
Buyers	100	3	36,500	4	51,099	4	53,655
Clerical	100	5	19,780	5	20,770	5	21,808
Rental Equipment			9,900		12,000		15,000
Supplies and Misc. Expense			9,500		9,500		9,500
Budget Program Costs		10	$ 83,210	10	$ 98,226	10	$105,043
Equipment (Invested Cost)			3,800		3,800		3,800
Total Program Costs		10	$ 87,010	10	$102,026	10	$108,843

CLARK COUNTY SCHOOL DISTRICT
Las Vegas, Nevada

DEPARTMENT Purchasing DATE July, 1970

PROGRAM: Purchasing Function

ALTERNATIVE

General Objective

The purchase of all instructional supplies, textbooks, library books, maintenance supplies, transportation supplies, cafeteria supplies, educational equipment and services used within the District.

Specific Objective

To service our customers in an expedient manner.
Costs to produce purchase orders will be held within acceptable limits.
To provide complete documentation of all purchase transactions.
To reduce past due orders.
To establish a closer liaison between our customers.
To process all emergency procurements within 8 hours after receipt.
To establish a vendor rating system.

Services

Conduct pre-bid conferences.
Issue formal & informal bids.
Review specifications.
Issue purchase orders and change orders.
Process over, short & damage reports.
Secure competition.
Conduct bid openings.
Insert newspaper advertisements for bids.
Provide auditing services
Process emergency procurements.

This alternative requires $45,442 in additional resources. It provides for: establishing a vendor rating system; closer liaison between schools; reduction in past due orders; and complete documentation of all purchase transactions.

Evolution

Purchasing files will be reviewed for compliance of State l[illegible] and Board policy - a 10% sampling of each buyers purchase files will be made on a weekly basis.
Specifications on materials purchased will be continually up dated. Samples of purchases will be tested on a [illegible]
Requisitions will be processed into purchase orders within one week after receipt in the Purchasing Department. Requisitions that require processing through informal or formal bids will be processed 45 days after receipt in the Purchasing [illegible]
The costs to produce a purchase order will not exceed $[illegible]
A reduction in past due orders by 25%.
Visit each principal and/or administrator at least once during the school year to determine if we are meeting their needs.
The establishment and development of a vendor rating system.

	1970-71			1971-72		1972-73	
Resources	% of Time	Number of Persons	Cost	Number of Persons	Cost	Number of Persons	Cost
Director	25	1	$ 4,626	1	$ 4,857	1	$ 5,000
Assistant Director	20	1	2,904	1	3,049	1	3,200
Buyers	100	8	95,072	10	124,782	10	131,071
Auditor	100	1	10,000	1	10,500	1	11,025
Clerical	100	12	47,472	14	58,153	14	61,090
Rental Equipment			9,900		12,000		15,000
Supplies and Misc. Expense			10,600		11,500		12,000
Equipment			10,000		5,000		-0-
Budget Program Costs		23	$190,574	27	$229,841	27	$238,386
Equipment (Invested Cost)			5,000		15,000		20,000
Total Program Costs		23	$195,574	27	$244,841	27	$258,386

APPENDIX C

THE DADE COUNTY SCHOOL DISTRICT

OVERALL

Dade County, Florida, is the fifth largest school system in the U.S.A. It has 16,000 employees and 250,000 students in 250 schools. At the present time, it is faced with the major problem of desegregation, with it associated violence and security problems (the security budget exceeds one million dollars). Furthermore Cuban refugees create two other types of problems: transiency and a language barrier, the latter necessitating special classes in Spanish.

Dade County became involved in PPBES in 1968, after receiving a federal government grant of $160,000 over three years to participate in a project to develop an operational PPBE System. Although participation in the federal project precipitated the introduction of PPBES in Dade County, it was a natural development from their responsibility-centre budgeting, and therefore they might have moved in that direction anyway. The state government, while having no direct involvement with PPBES, is supportive and "watching with interest".

A project coordinator with two assistants is responsible for directing PPBES in the school district. Initially the project was set up on a pilot basis, with certain division/districts piloting certain aspects of the project. At the present time however, all divisions and districts are budgeting on a program basis, with definition of objectives and selection of indicators still on a pilot basis.

The orientation of Dade County differs markedly from that of Alberta in that PPBES is seen to be primarily a management tool which is useful for planning and budgeting. There is no intention of developing a program accounting system. True costing of programs, in particular curricular programs, is dismissed as not being of major importance. Although a great deal of emphasis was placed on definition of objectives and indicators, little or no emphasis was placed on alternative methods of achieving those objectives. Alternatives, of course, imply costing procedures.

GOALS AND OBJECTIVES

Dade County is making good progress in defining goals and objectives. However, because of their pilot orientation, not all divisions and districts have completed this process and at the present time, only pilot districts/ divisions have comprehensive goals. This year, at the district level, goals are being defined only for the areas of management, instructional development, and pupil personnel. In addition, goal and objective definition is partially dependent on the budgeting process. That is, at the district and school level, objectives, activities and indicators are developed for each new or supplementary appropriation. These objectives, however, are not necessarily in performance terms. This work is done, in the main, by department or district heads, with little or no other involvement. There are no plans in the near future to move into the area of instructional objectives defined at the classroom level.

PROGRAM STRUCTURE

To date a number of program structures have been developed and a copy of the program structure in use at present is included in the

Addendum to this report. Previous program structures were discarded since they were felt to have an overly theoretical orientation. The final program structure was developed mainly by the PPBES Staff, with feedback from various administrative groups. It has a multi-level heirarchical structure, of which only the first level is actually used at this time. The area of "Special Programs" indicates the priorities of the system. Also, the "Special Programs" area is the change mechanism. When a program needs examination or improvement it is removed from the "Regular Program" and inserted in the "Special Program" where it is carefully monitored. After examination and improvement, it is re-entered into the "Regular Program" in a new form. Although this structure seems to have a target group orientation, in actual fact it is simply a representation of actual programs being pursued by the school system. The accounting system has not changed appreciably since the advent of PPBES and bears little relation to the program structure. Budgeting, however, is tied very closely to the program structure. At the present time budgeting is done by responsibility-center by programs.

ANALYSIS AND MONITORING OF PROGRAMS

The school district has a well-developed Program Evaluation Department which is mainly involved in monitoring on-going programs to ascertain the degree to which they are meeting their stated objectives. System-wide standardized tests are administered regularly and their results published. These tests are normally in cognitive areas, such as Mathematics and Reading. In addition, a statistical sample of 600 classrooms is used for testing morale, on-task time of students, and other assorted pupil-teacher relationships. However, at the present time, there is little liaison with the rest of the PPBE System. The department feels that they are leading in this area of curriculum evaluation and hopes that in future, there will be need for more evaluation in connection with PPBES.

In addition to the Program Evaluation Department, there is also an Administrative Research Section which produces annual descriptive reports on such things as pupil projections, composition of personnel, desegregation reports, and student retention. At the present time, this department is not coordinated with the PPBE System.

INFORMATION BASE

Although a fairly comprehensive data base existed before the advent of PPBES there is still a deficiency in some areas and some of the data available is in a wrong form. The hardware used in an IBM 360/50 and negotiations are in progress for an IBM 370 to replace it. It is anticipated that with proper programming both financial and non-financial data will be available in many formats with very short (half day) turn-around-time.

Since program accounting is not part of the Dade System, there is no allocation between programs and no attempt to find actual cost of programs. If a decision is made to find costs of various programs, average cost methods would be used. Because of this orientation, Dade County feels that the present accounting system is more than adequate.

On the other hand, Dade County has a highly developed non-financial data base which includes pupil files, community profiles, teacher files, and facilities usage files.

CONCLUSION

All personnel within the school system who were interviewed felt that once the PPBE System was fully operational, with integrated components, a great deal of benefit would accrue to the users. They also felt that the significant difference caused by PPBES was the creation of a new mode of thought focusing on objectives and therefore causing greater rationalization of planning and budgeting decisions. At the present time, there is no plan to involve anyone in PPBES except the business management, although the system of budgeting may reach as far as school principals. Because of the orientation towards PPBES as a management planning and budgeting tool, the scope of the project in Dade County is not as wide as was hoped. However, fairly rapid progress is being made in those areas of PPBES which the school district has decided to emphasize. [Please see the Addendum to this Appendix for illustrative materials.]

OVERVIEW OF DADE COUNTY PUBLIC SCHOOLS PROGRAM STRUCTURE*

(Responsibility Center Dimension)

	Schools					Districts**		System**	
	Elementary Centers	Middle/Junior High Centers	Senior High Centers	Adult Centers	Special Centers	Instructional Centers	Support Centers	Instructional Centers	Sup Cen
REGULAR PROGRAMS									
Kindergarten	X								
General Instruction	X	X	X						
Occupational Instruction		X	X	X		X			
Continuing Instruction				X		X			
Community Services								X	X
SPECIAL PROGRAMS									
Compensatory						X		X***	
Cuban Refugee	X	X	X	X	X				X
Drug Abuse									X
Exceptional Child	X	X	X		X		X	X	X
Reading Remediation	X	X	X	X					X
SUPPORT PROGRAMS									
Instructional Support	X	X	X	X		X	X		X
Auxiliary Services	X						X		X
Facilities Support	X	X	X		X		X		X
Administrative Support							X		X

*Program budget from EDP Report P-10 and manual posting of EDP Report P-20: by program for Regular/Special, by subprogram for Support.
**Miscellaneous centers will also be included.
***Tentative budget only: not included with EDP system; tentative plans/budgets of all Part IV appropriations will be included for information.

3/6/71

	PROGRAM	SUB-PROGRAM	ELEMENT
REGULAR	General Instruction* Occupational Instruction* Continuing Instruction*	Primary Intermediate, Language Arts Industrial Education	English 1** General Mathematics** Airframe Mechanics** French 3** Typing 1**
SPECIAL	Compensatory* Cuban Refugee* Drug Abuse* Exceptional Child* Reading Remediation*	Compensatory Instruction Administration English-as-a-Second Language Emotionally Disturbed Socially Maladjusted Remedial Reading	
SUPPORT	Auxiliary Services Instructional Support Facilities Support Administrative Support	School Food* Educational Media* Pupil Personnel Services* Plant Operations* Financial Services* Management*	School Food Administration Guidance/Counseling Services Accounting District Management

*Denotes level of programs in which program plans and budget will be developed during a start up phase: within the FOT by a combination of account codes, responsibility centers, and revised program codes will also be developed to support this application.

**Denotes elements currently not utilized within the system.

Note: The Dade County Public Schools Program Budget for FY 1971-72 will include a full program breakdown. Program budgets to a more detailed levels than coding as indicated will be achieved by the use of allocation/proration formulas.

Page ____ of ____

DISTRICT/DIVISION SUMMARY STATEMENT

District/Division:	Prepared by:	Reviewed by:	Date:

FORM 20
Effective: July 1, 1971

District/Division:

Page ____ of ____

PROGRAM PLANS

Identification Section	Responsibility Center Name	Code Number	Program Name	Code Number	Prepared by	Reviewed by	Date

SUMMARY REVIEW OF CURRENT YEAR OPERATIONS

FORM 30A
Effective: July 1, 1971

DESCRIPTION OF PLANNED PROGRAM IMPROVEMENTS/CHANGES

Page ____ of ____

IDENTIFICATION OF OBJECTIVES AND REQUIREMENTS

Responsibility Center Name:	Code Number:	Program Name:	Code Numb

Objective	Activities	Indicators	Personnel Requirements					
			Code					
			No.					

FORM 30B

Effective: July 1, 1971

IDENTIFICATION OF OBJECTIVES AND REQUIREMENTS (Continued)

Objective	Activities	Indicators	Personnel Requirements					
			Code					
			No.					

APPENDIX D

THE SAUGUS ELEMENTARY SCHOOL DISTRICT

OVERALL

The Saugus Elementary School District, situated some 45 miles northwest of Los Angeles, covers an area of 90 square miles and has a student population of 4,500 in 9 schools with 161 teachers. Saugus is a predominantly white, middle-to-upper middle-class community with approximate five per cent of its population Spanish in origin. The great majority of the population depends on the aerospace industry for its livelihood, but there is also a significant group, approximately ten per cent, of retired people and transient farm laborers.

The Saugus district began to implement PPBES in 1968 when it became one of the participating school districts in a PPBES pilot project being directed by the California State Legislature's Advisory Commission on School District Budgeting and Accounting. The aim of this project is to design, test, and ultimately implement on a state-wide basis, a PPBE System.

Non-economic factors appear to have been more prominent than economic factors in the Saugus School District's decision to implement PPBES. In the first place the Superintendent, on the basis of his formal training and experience, has a strong commitment to PPBES as a concept. Other important factors which no doubt influenced the decision included the need to improve resource allocation, communication, and curriculum development; a better clarification of educational needs; a desire to obtain greater involvement of teachers and students in the educational process; the limitations of the traditional budget; plebescite preparation; and state mandate.

Although no one in the school district is assigned to work in PPBES on a full-time basis, a small group of persons, each of whom seem to have a personal commitment, is responsible for directing and coordinating activities leading to its eventual implementation: the Superintnedent; the Business Manager; the Purchasing Agent; a school principal who is the teachers' project director; and the director of Educational Management Specialists Inc. (EMSI), a private consulting firm.

Some funds for PPBES have come from the Federal Government by means of a Title III Project grant and amounted to $4,000 in 1968-69, $7,000 in 1969-70, and $1,000 in 1970-71. The funding was used mainly for travel and subsistence and in year two for the utilization of an on-site terminal.

The factors which have facilitated the implementation of PPBES in Saugus can be identified as the strength of the superintendent, wide involvement of teachers, support of board of education, small size of district, homogeneous population, involvement of all publics, sufficient financial funding, and an existing goal statement. Identifiable constraints were the state law requiring at least 60 per cent of the budget for salaries, general apprehension among the teachers, and state financial reporting requirements (J41 form).

Saugus has implemented almost all phases of a PPBE System except analysis. However, some phases are more advanced than others. The planning phase of goal and objective setting and specification of evaluative criteria, along with time-phasing of their programs and evaluation of programs have been in operation for one school year, while computerized program accounting has only recently been implemented. Initial planning and budgeting by program has also been in operation for one year. It is planned, however, eventually to delve deeper into all aspects of PPBES.

Because the PPBE System has been in actual operation for only a short time, few changes have been made as a result of any analysis or evaluation which has been carried out. However, the Superintendent and some teachers indicated that changes in the programs and performance objectives would be made at the end of the school year because of evaluative results. It is also expected that the reports generated by the accounting system will be useful in planning and budgeting.

The importance of a carefully planned in-serivce education program for the successful implementation of PPBES was noted. Initially, a task force consisting of representatives from the school district office, principalship, teachers, community and students was selected to coordinate the PPBES efforts. The members of the Task Force received six to ten hours of in-service training. In turn, a coordinating committee, a Citizens Ad Hoc Committee, and teacher work teams in program structure, orientation, objectives and evaluation, and accounting and budgeting were established. These teams were all given in-service training so they could adequately perform their roles.

GOALS

The specification of district-wide goals for the Saugus school district was greatly facilitated by such factors as the smallness and relative homogeneity of the district, the fact that the district is responsible only for K-6 education, and the strong influence of the superintendent.

Goals were defined through committees, and a Citizens Ad Hoc committee, made up essentially of key influentials in the community was able to reach concensus in two months on a written set of district goals. A copy of the district goals statement is included in the Addendum to this Appendix. The goals, which cover all activities of the school district, will not be reviewed for at least three to five years. Following the development of the goals statement, the committee was disbanded for political reasons.

OBJECTIVES

Comprehensive performance objectives, mostly quantitative, with corresponding criteria and evaluative techniques, have been specified for each goal identified. (Please see the Addendum for examples.) This work was done by teacher sub-committees or writing teams under the direction of a district coordinating committee. The work of these committees was then passed on to system-wide curricular teams for final editing.

All teachers received comprehensive training in the writing of performance objectives through a number of in-service workshops. Little if any reference was made to existing objectives in other school systems. Since Saugus is just completing the first year of program evaluation it is not yet known whether the specified objectives in fact adequately reflect the goals.

PROGRAM STRUCTURE

The program structure is curriculum-based and an adaptation of the state structure to fit the needs of Saugus District. (A copy of the program structure is shown in the Addendum.) It describes all activities of the school district, has six levels, and is flexible enough to demonstrate various aggregations. An accounting system has been established based upon the program structure. Planning should be facilitated by this structure, for it is stable, and historical financial data based upon the structure will not be generated.

ANALYSIS

Although the Saugus district has not moved into the analytical stage of PPBES one school has used the systems analysis approach to develop its programs and means to accomplish objectives. Other schools had been encouraged to develop some alternatives for achieving specific goals. The superintendent felt that full analytical procedures should follow PPBES implementation by two to three years. In implementing PPBES, it was considered important first to measure what is presently being done, and then to move into alternative generation and analysis. It is the philosophy of the district that each school determines the most effective means for achieving performance objectives set by the district.

MONITORING OF PROGRAMS

Instructional programs are evaluated by both the superintendent and a team of teachers and administrators which travels from school to school towards the end of the school year. Evaluation is based upon the evaluative criteria established and the specification of the performance objectives. Formative evaluation is basically conducted by the team of teachers while summative evaluation is the responsibility of the Superintendent. Consequently it is the Superintendent who determines the level to which specified objectives are achieved.

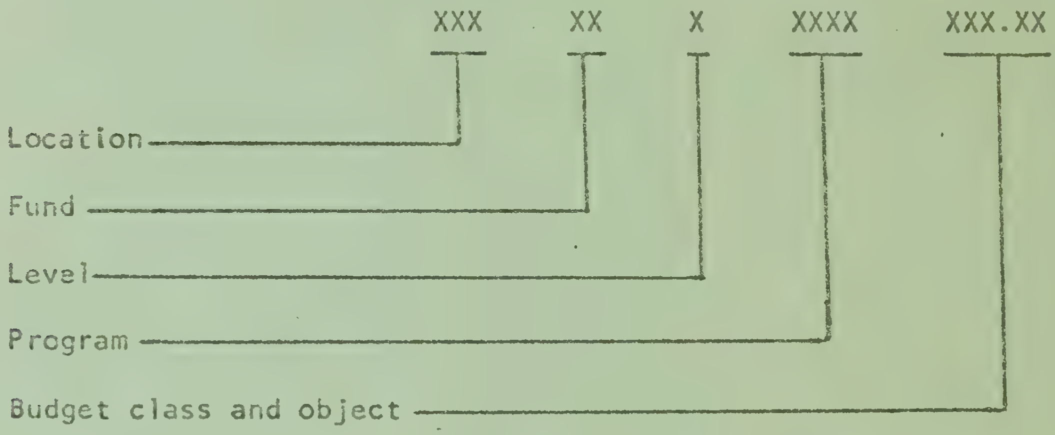
Methods such as standardized tests, teacher tests, and interviews are used by the evaluation team while the superintendent prepares his own instrument for each evaluation. The results of the evaluation are stored at the school district office. Each year, the results are studied and analyzed, and, if appropriate, used to make changes in programs. Saugus appears to operate independently, perhaps by design, and hence does not compare its operation to others.

INFORMATION BASE

Prior to the inception of PPBES, the data base was deficient in most areas except control. In 1969-70 a terminal connected to Los Angeles County computer system was installed but soon proved unsatisfactory. Now the school district's data processing is carried out by a service center to which source documents are sent.

Saugus has developed two distinct financial reporting systems: a financial accounting system and a program account system. The financial accounting system distributes costs by location and states functional-object categories as well as accounts by programs whenever funds can be clearly budgeted to programs. At no time will the financial accounting system accept expenditures coded to a program that has not been set up on the allocated budget. The management information system, basically a planning system, reports to program directors (principals, department heads, etc.) the amounts encumbered on purchase orders issued against their respective programs.

There are two reasons for the dual accounting system: to maintain the integrity of the present accounting system while providing program accounting to the level of detail of the program budget, and to providing finely detailed object and program reporting as an aid in future planning. Incidentally, these two are not in mathematical balance. The integrity of the present accounting system is essential because of state reporting regulations (J41) and because very few programs were budgeted to, creating a need for a link. The chart of accounts is a 15-digit numeric code with five fields which can be illustrated as follows:



At present, the data base does not contain information on pupils, programs, personnel, facilities, and community. It is hoped, however, that eventually data will be available for each of these areas.

The reports presently being generated by the data center are mainly financial in nature. (Please see Addendum for examples.) Types of reports, together with the personnel for whom they are produced, are shown on the next page.

Report	To Whom
1. Location by budget classification	BM, S, B
2. Budget classification by location	BM, S, B
3. Program by budget classification and location	BM, S, B
Budget classification	BM, S
Outstanding Purchase Order History	BM, S
Invoice History List	BM, S
Expenditure History by Vendor	BM, S
Immediate card report of encumbrance by location per program	SA
Programs by location and budget class	SA, S

---

egend of To Whom: B - board S - superintendent

BM - business manager SA - school administrator

The management information system is able to report all encumbered nounts by location, program, and budget class, because a separate purchase rder is issued by program and by object for each location. The same is rue of invoices. It is anticipated that, as more and more programs are dgeted for, more actual expenditures will be reported by programs.

Various proration statistics are used to allocate dollar costs programs. Most of these have been set by the Superintendent -- pecially those pertaining to support programs. The plan is to retain e integrity of each program in accounting but to re-allocate all port program costs to instructional programs as part of an annual alysis. The amount of teaching time for each program has been estimated and used as a basis for pro-rating and encumbering salaries at the beginning of the year and updating them monthly.

Central office personnel have indicated that PPBES dicates data processing as well as encumbrance accounting. Program budgeting is not yet carried out by responsibility center, but the intention is to do so. To date resources to schools have been allocated by a Materials Review Committee which comprises two teachers from each school, the Business Manager, Superintendent and his assistant. The Saugus intended budget time-frame of one year while the plan is three to five years. There is no problem with the fiscal and school year since they coincide.

CONCLUSION

Saugus Unified School District has implemented most phases of a PPBE System. At present, the major emphasis is on implementing a program accounting and information base system. Analysis on a system-wide basis does not yet exist, although one school did use systems analysis in program development. The PPBES basic concepts in Saugus are similar to and compatible with views in Alberta.

Most developments have taken place in the instructional programs; non-support programs seem entirely controlled by the Superintendent. There appears to have been little or no involvement of support staff -- in fact, one interview suggested that the Director of Transportation did not know what was happening with his area in PPBES. The Superintendent also loomed centrally in instructional developments, exercising strong influence and perhaps control in the development of goals, specification of objectives, determination of evaluation criteria, and actual evaluation.

SAUGUS UNION SCHOOL DISTRICT

P.P.B.S.

GOAL STATEMENTS

1. To develop skill in basic tool subjects which will enable the individual to pursue life-long learning.
2. To teach students how to think and to help students develop modes of inquiry so that the student can function as a citizen in a rapidly changing society.
3. To become aware of basic concepts, knowledge, and the structure of selected academic areas.
4. To develop habits of good citizenship and self-discipline.
5. To develop appreciation for our American heritage and our economic system.
6. To expose students to important elements of the humanities and our cultural heritage.

Adopted Goals of Instructional Program

Set by the Goals Committee

A. The Major Objectives of Education in the Saugus District

1. To develop skill in basic tool subjects which will enable the individual to pursue life-long learning.

2. To teach students how to think, and to help students develop modes of inquiry so that the student can function as a citizen in a rapidly changing society.

3. To become aware of basic concepts, knowledge, and the structure of selected academic areas.

4. To develop habits of good citizenship and self-discipline.

5. To develop appreciation for our American heritage and our economic system.

6. To expose students to important elements of the humanities and our cultural heritage.

B. Educational Program

1. It is expected that each student will be considered as an individual, and that a consistent effort will be made to present a challenging program so that each student has opportunity to meet the outlined objectives to the best of his capabilities.

2. It shall be the philosophy of the district to present an educational program based on student capability without regard for artificial grade level barriers.

3. The Saugus schools are not primarily responsible for those aspects of child growth and training traditionally assigned to the home, the church, the community, and other agencies.

C. American Heritage and Economic Literacy

1. One of the major responsibilities of the classroom teacher is the development of a lifelong love of our American heritage. It is expected that a conscious effort on a regularly planned basis shall be made by each teacher.

2. Each teacher shall be responsible for developing economic concepts and appreciation for our economic system commensurate with the maturity level of his students.

3. Our way of life and our economic system has produced the highest degree of personal freedom and the highest standard of living the world has ever known. Imagin tive teaching will enable students to discover how this system developed, its advantages, and what responsibilities our citizenry have to nurture and preserve our American heritage.

SAUGUS UNION SCHOOL DISTRICT

ADDITIONAL PROGRAM GOALS WRITTEN BY THE SUPERINTENDENT

1. Each child in the district with special needs which result from a physical handicap shall be placed in a program which will most properly meet the unique needs and develop the youngster in his fullest potential.

2. The goal of the summer school program is to offer a program of basic education and enrichment to extend educational opportunities for students during the summer vacation period.

3. Each student should become aware of the basic concepts, knowledge, and the structure of selected academic areas. In addition, each student should develop appreciation for our American heritage and our economic system. The following sub-skills shall be developed as a result of the project:

   a. To develop an ability to read and interpret maps and globes.

   b. To recognize major world physical and cultural distribution patterns.

   c. To understand regional concept and ways of interpreting man-land relationships within a region.

   d. To develop an ability to read and interpret maps and globes to other specialized media used in geographical analysis.

   e. Understand the basic facts about the history of our country and of other areas of the world.

   f. Use his knowledge of our heritage and that of other areas to interpret present ways of living.

   g. Develop skill in gathering and interpreting information as an aid to critical thinking and problem solving.

   h. Learn to recognize likenesses and differences in ways of living in different parts of the world.

   i. Learn to base attitudes toward people of other lands (and at home) on awareness of the problems which they face.

To provide support media in the form of motion pictures and district audio-visual aids to enhance the instructional program.

To make available to staff members the opportunity to upgrade their professional competency through attendance at conferences, workshops, and meetings in addition to district in-service training activities.

(In terms of job description of Director of Instruction)

a. Provides leadership in the development and improvement of educational services, interprets the curriculum and assists the principals in the supervision of instruction.

b. Acts as a member of the management support team which develops general policies concerning the instructional programs and coordinates the execution of developed policies.

c. Develops curriculum materials and works with faculty committees concerned with the curriculum, guidance, and the instructional program.

d. Organizes and administers the in-service education program for the professional staff and coordinates the services of advisory personnel.

e. Prepares special and periodic reports and compiles statistical information.

f. Performs such other duties as are assigned by the superintendent.

7. To provide personnel for supervision at playgrounds, multi-purpose rooms, and other school premises during lunch hour as provided in Education Code Sections 13561.1 and 20801.

To provide health services as follows:

a. Vision screening annually for all students with a modified clinical examination for all first graders and referrals.

b. Hearing screening for all first grade pupils, pupils new to the district, and other referrals.

c. Speech defect screening for all referrals.

d. First aid for pupils as required.

e. Maintenance of necessary pupil health data records — measles and polio immunizations, vision, hearing, etc.

8. To provide psychological services for identification and placement of exceptional pupils (educable mentally retarded, educationally handicapped, gifted, etc.); for counseling with pupils, parents, and staff about individual pupil or behavior and/or educational problems; for consultation concerning relevant psychological data sources in development and implementation of instructional programs.

To promote regular pupil attendance and to maintain and prepare necessary pupil attendance records and reports.

To provide district-wide testing and evaluation services including:

a. State mandated testing.

b. Such additional group testing as the district may determine to be relevant to the evaluation of its objective.

c. Development of district-normed evaluative techniques and instruments.

9. Board of Trustees

a. To develop, adopt, and revise district policies and procedures for the control, management and operation of the district.

b. To employ personnel.

c. To adopt an annual budget.

d. To perform an ongoing evaluation of the instructional program.

e. To evaluate the performance of the superintendent.

Superintendent

a. To serve as executive officer of the Board of Trustees in enforcement and implementation of all decisions and policies of the Board.

b. To act as secretary to the Board of Trustees.

c. To direct, administer and supervise all phases of school district operation.

d. To recruit, recommend selection, and assign all certificated personnel, and to maintain personnel records.

e. To evaluate annually all district certificated personnel and all building principals.

f. To maintain a continuing public information program to serve patrons of the district and the general public.

Business Services

a. To maintain a system of budget preparation, budget management, accounting and financial reporting for all funds of the district.

b. To implement and manage the purchase of supplies, equipment, and services necessary to the operation of the district.

c. To direct and manage other aspects of district operation, including elections, bonds, legal affairs, civic center activities, attendance, employee benefits.

d. To recruit, recommend selection, and assign all classified personnel and to maintain personnel records for classified employees.

0. The district will seek to provide better than average school facilities, adequately equipped, and set in a harmonious environment. The district will endeavor to utilize design, construction methods, and materials that will assure school facilities that will be adaptable to changing instructional methods over an extended period of years, and to do this within cost limits set by the State School Building Fund regulations. These general goals may be translated into more detailed goals as follows:

a. To maintain a continuing liaison with the district architectural firm(s) during all phases of site selection, facilities, planning, and construction.

b. To maintain a continuing surveillance of district growth and enrollment patterns as a basis for site selection and facilities construction.

c. To coordinate, supervise and/or perform the several tasks leading to site acquisitions — including identification of alternate locations, appraisals, engineering studies, negotiations, approvals of Regional Planning, Bureau of School Planning, Office of Local Assistance, condemnation or escrow proceedings.

d. To prepare and/or provide necessary data for the preparation of Justification Documents and State School Building Fund applications (site, plans, construction).

e. To maintain master files and other related files to handle all correspondence relating to the construction management program of the district.

f. To do the financial accounting, including accounts payable, for the State School Building Fund of the district.

g. To monitor, in close cooperation with the architectural firm, the construction of school facilities under the general contractor, including supervision of the job building inspector.

h. To coordinate, supervise, and/or perform those activities of construction and purchase of equipment deferred from the general contract and to be accomplished by the district.

i. To monitor facilities and equipment following construction for a period of one year, assuring that all corrective measures are taken as necessary and all guarantees met.

11. To involve the district in a cooperative working relationship with the Advisory Commission on School District Budgeting and Accounting (Department of Education) and the selected contractor to implement PPBS in the budgeting—accounting—instructional operation of the district during 1969-70, using the format developed during 1968-69.

To test concepts, procedures, and instruments developed through the 1968-69 PPBS project.

To evaluate the effectiveness and applicability of the PPBS format developed in 1968-69.

To involve district personnel in a continuing in-service activity to develop staff responsiveness and commitment to institutional programs built around behavioral objectives.

To develop valid evaluative devices for use in evaluating general education and special education program objectives formulated in 1968-69.

12. To keep all physical plants open and ready for use, all buildings, equipment, and grounds neat, clean, healthful and attractive at all times for pupil, staff, and public use.

To maintain buildings, equipment, and sites in the best possible condition for efficient utilization

a. through preventative maintenance.

b. through routine maintenance.

c. through emergency maintenance when necessary.

d. through equipment replacement.

To provide for utility services, inter-district mail and delivery service, and hauling.

3. To provide effective and safe transportation to and from school for regular pupils plus EMR, TMR, EH and Hard of Hearing pupils* who live one mile or more from their school.

   *Costs for these pupils will be allocated to appropriate programs at the conclusion of the year or credited as an abatement.

4. To make milk available for pupil or staff purchase including providing milk and lunch for needy pupils at minimum cost to the district.

   To make space, supplies, and necessary furniture available for pupils to eat lunch and to maintain these facilities in a clean and sanitary condition.

   To provide all required reports to County, State and Federal agencies.

5. To provide for receiving, warehousing, and filling requisitions of consumable instructional, office and custodial supplies.

   To act as central receiving for all supplies and materials ordered on buy out by any district program.

   To provide packaging and shipping service for repairable audio-visual equipment being sent out for repairs.

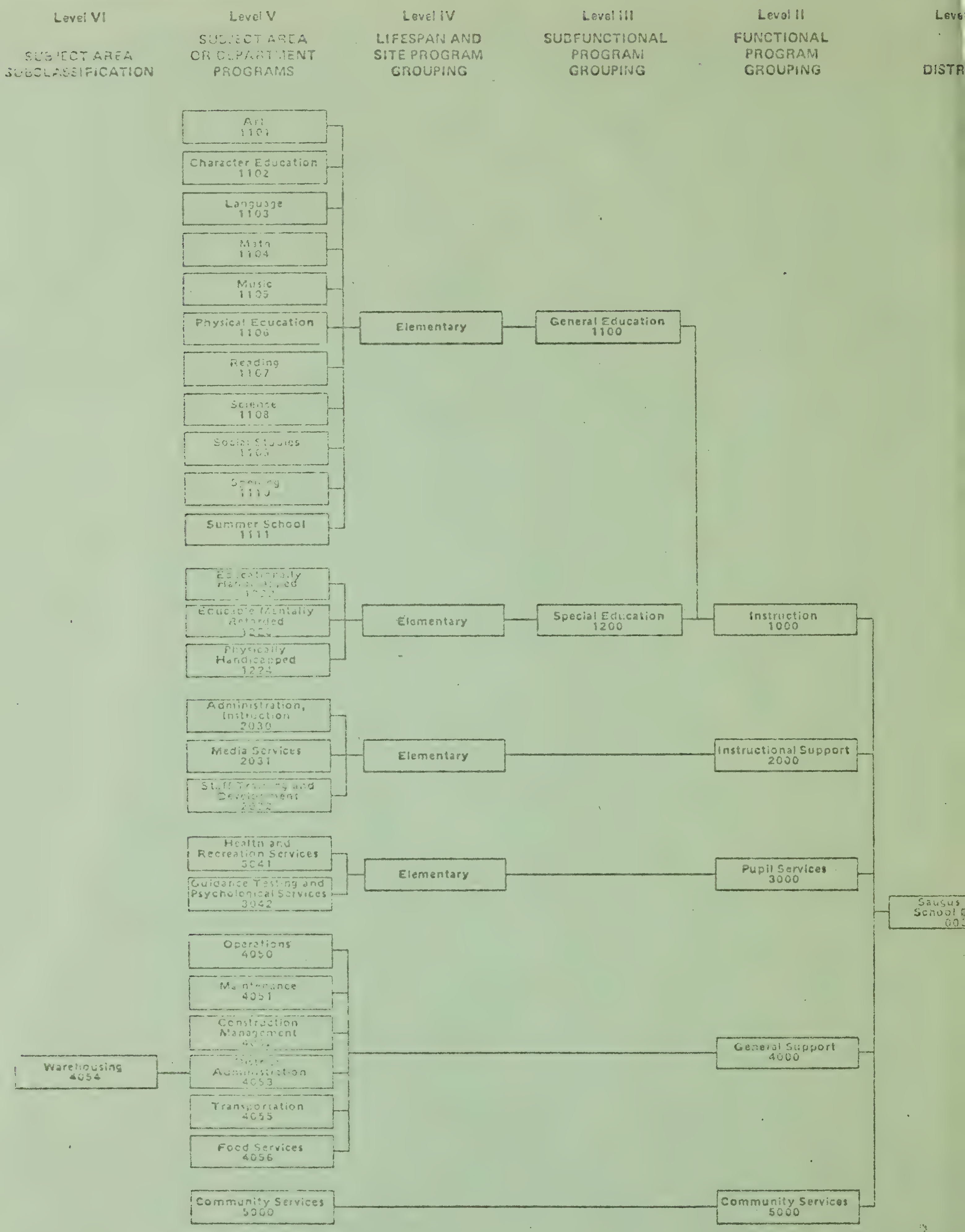
   To receive, stamp, and distribute all state textbooks obtained via the Annual Textbook Order.

   To maintain supplies of district publication.

6. To permit, encourage, and provide for use of school district facilities by community groups and organizations whose purposes and objectives contribute to the development and welfare of the community at large.

   To cooperate with the Los Angeles County Parks and Recreation Department in making possible their conduct of various programs at school facilities both during the school year and school vacation periods.

   To purchase equipment and provide grounds, improvement, maintenance and operation that will make school playgrounds available for community recreational use during non-school hours.


Level VI
SUBJECT AREA SUBCLASSIFICATION
Level V
SUBJECT AREA OR DEPARTMENT PROGRAMS
Level IV
LIFESPAN AND SITE PROGRAM GROUPING
Level III
SUBFUNCTIONAL PROGRAM GROUPING
Level II
FUNCTIONAL PROGRAM GROUPING
Leve
DISTR
Art 1101
Character Education 1102
Language 1103
Math 1104
Music 1105
Physical Education 1106
Reading 1107
Science 1108
Social Studies 1109
Spelling 1110
Summer School 1111
Elementary
General Education 1100
Educationally Handicapped 1222
Educable Mentally Retarded 1223
Physically Handicapped 1224
Elementary
Special Education 1200
Instruction 1000
Administration, Instruction 2030
Media Services 2031
Staff Training and Development 2032
Elementary
Instructional Support 2000
Health and Recreation Services 3041
Guidance Testing and Psychological Services 3042
Elementary
Pupil Services 3000
Saugus School
Operations 4050
Maintenance 4051
Construction Management 4052
Warehousing 4054
District Administration 4053
Transportation 4055
Food Services 4056
General Support 4000
Community Services 5000
Community Services 5000

PROGRAM DATA SHEET

Program Title: Math
Program Level: V
Program Code: 1104

Fund: General
Location: District

RESOURCE REQUIREMENTS	1970-71		1971-72	1972-73	1973-74	1974-75
	QTY.	AMOUNT				
1. Estimated A.D.A.						
2. Teacher Position						
3. Certificated Salaries	25	260,752				
4. Classified Salaries		8,708				
5. Employee Benefits		16,991				
6. Books & Supplies		10,494				
7. Support Prog. Service		1,483				
8. Other Services		1,118				
9. Other Outgo						
10. Sub-Total		299,546				
11. Cost/ADA (Line 10)						
12. Projected Cost Increase/ADA						
13. Projected ADA Cost						
14. Projected ADA						
15. Projected Cost						
16. Equipment Replacement		247				
17. Capital Outlay		977				
18. Total Projected		300,770				
REVENUE SOURCES:						
19. Federal		31				
20. State		107,405				
21. County		962				
22. Local		192,372				
23. TOTAL		300,770				

SAUGUS UNION SCHOOL DISTRICT

P.P.B.S.

Program Code 1104

MATH

LEVEL A:

1. Given a series of ten numerals between ten and one hundred, 90% of the children will be able to write at least seven of them in proper order.

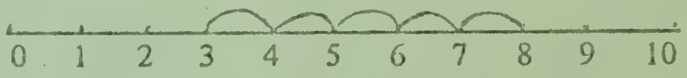
   Example: 20 10 12 11 13 15 14 18 17 16 19
   10 11 12 13 14 15 16 17 18 19 20

2. Given ten sets of digits on a piece of paper, 90% of the students will be able to properly use the >, <, = signs to designate between the digits and to label at least seven sets.

   Example: $6 \textcircled{>} 3$ $3 \textcircled{<} 4$ $2 \textcircled{=} 2$

3. Given five addition and five subtraction equations, with no addends or sums greater than ten and a piece of paper with number lines, 90% of the students shall solve seven of the equation using the number line.

   Example: $3 + 5 = 8$



4. Given three addition and two subtraction equations whose addends are two digit numeral 90% of the students will be able to expand and solve at least four.

   Example:

$$\begin{array}{rcl} 26 & = & 20 + 6 \\ +\underline{13} & \underline{=} & \underline{10 + 3} \\ & & 30 + 9 = 39 \end{array} \qquad \begin{array}{r} 26 \\ \underline{+\ 13} \\ 39 \end{array}$$

5. Given ten numerals all less than one hundred, 90% of the students will be able to circle all those numerals that are odd.

   Example: ⑨ 10 12 ⑬ ⑰ 20 22 ㉛ ㊶ 36

6. Given five equations, containing three addends each, whose sums are twelve or less, 90% of the students will be able to solve at least four.

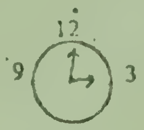
   Example: $3 + 2 + 1 = \boxed{}$

7. Given five addition equations whose addends are less than ten, 90% of the students will be able to complete the family of facts for at least four of these equations.

   Example:
   $3 + 5 = 8$
   $5 + 3 = 8$
   $8 - 3 = 5$
   $8 - 5 = 3$

8. Given a sheet of paper with ten clock faces on it, 90% of the students will be able to list at least seven of the times, under the appropriate clocks.

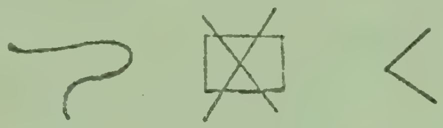
Example:



$\boxed{3}$ o'clock

9. Given a sheet of paper that contains ten figures, 90% of the students will be able to put an X on all those figures that are closed.

Example:

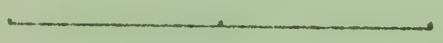


10. Given five sets of objects on a piece of paper, each set being a multiple of four, 90% of the students shall be able to shade 1/4 of the objects in at least four sets.

Example:

11. Given five lines on a sheet of paper, 90% of the students will be able to measure the approximate length of each line, with a ruler, to the nearest inch, for at least four of the lines.

Example:



$\boxed{2}$ inches

LEVEL B:

Given the following terms, 90% of the students will be able to draw or write an example of each term: set, numeral, equation, addition, subtraction, and family of facts.

Given a simple story problem, i.e., one that contains only one operation, 90% of the students will be able to write a number sentence that could solve the problem.

Given a three digit numeral, 90% of the students will be able to state the place value of each digit.

Given a series of geometric forms in which regions of 1/4, 1/3, 1/2, 2/3, 3/4 are shaded, 90% of the students will be able to label the shaded portion correctly in at least four cases.

Given ten addition problems that have three digits but that require no regrouping. 90% of the students will be able to solve at least seven.

Given ten three digit subtraction problems that require no regrouping, 90% of the students will be able to solve at least seven.

Given the following geometric shapes, 90% of the students will be able to label each shape correctly: circle, triangle, square, and rectangle.

LEVEL C:

Given the following terms, 90% of the students will be able to match example of each term: cardinal number, regrouping, multiplication, division.

Given five four-digit numerals, 90% of the students will be able to state the place value of each digit with 80% accuracy.

Given five addition and five subtraction problems with three digit numbers requiring regrouping in one place, 90% of the students will be able to solve 4/5 of each type of problems correctly.

Given five problems with a three place multiplicand and a single place multiplier involving facts through 5's with one regrouping in each example, 90% of the students will be able to solv four problems correctly.

Given five division problems involving a two place dividend and a one place divisor, not requiring a remainder, 90% of the students will be able to solve four of the problems correctly.

Given the following assignment, 90% of the students will be able to draw lines accurately involving linear measurement on the inch and 1/2 inch with 80% accuracy.

Given five pictures of clocks, 90% of the students will be able to identify time involving quarter hour, half hour, and hour with 80% accuracy.

Given ten examples involving pennies, nickels, dimes, quarters, half-dollars, and dollars, 90% of the students will be able to match the amount with its equivalent amount with a 70% accuracy.

Example:

quarter
dime
dollar
penny
half-dollar
nickel
dollar

3 nickels
5 pennies
2 nickels

Given a series of five geometric forms in which regions of fractional parts involving fifths, sixths, sevenths, and eighths are used, the student will be able to correctly label the shaded portion in at least four cases.

Given a simple story problem involving one operation, either multiplication or division, 90% of the students will be able to write a number sentence and solve the problem.

Given the following geometric terms, 90% of the students will be able to match examples of a curve line, line segment, parallelogram, angle, cube, with the correct responses with 70% accuracy.

LEVEL D:

Given a six digit numeral, 90% of the students will be able to write the numeral in expanded form and state the place value of each digit with 70% accuracy.

Given five addition and five subtraction problems that only use whole numbers, 90% of the students will be able to solve at least four of each correctly.

Given five multiplication problems in which both factors are two digit numerals. 90% of the students will be able to solve at least four of the problems correctly.
Example: 47 x 39

Given five division problems in which the dividend is between 100 and 1000 and the divisor is a single digit, 90% of the students will solve at least four of the problems correctly.
Example: 783 ÷ 6

Given five addition problems in which the two addends are mixed numbers and the denominator of one is a multiple of the other, 90% of the students will be able to solve at least four of the problems correctly—the answer must be in the lowest terms.
Example: 3 2/3 + 17 5/6

Given five subtraction problems in which the sum and the given addend are mixed numbers and the denominator of one is a multiple of the other, 90% of the students will be able to solve at least four of the problems correctly—the answer must be in lowest terms. There is to be no regrouping between the fraction and whole number in the mixed number. Example: 13 3/4 - 7 1/2

Given the following symbols, 90% of the students will be able to match five of the symbols with their definitions:

∠, →, ↔, —, >, <.

Given the following terms, 90% of the students will be able to match at least eight of the terms with their definition:

Cardinal number
Triangle
Polygon
Vertex
Set

Prime number
Plane
Circle

Graph

Given a sheet of graph paper and a boy's height on his seventh through seventeenth birthday, 90% of the students will be able to construct a line graph depicting the boy's rate of growth.

LEVEL E:

Given five seven-digit numerals, 90% of the students will be able to write the numeral in expanded form and state the place value of each digit with 80% accuracy.

Given ten addition and subtraction problems composed of a five digit whole number, 90 of the students will be able to solve eight of the problems.

Given five sets of numerals made up of whole numbers, 90% of the students will be able to complete four of the sets by filling in the correct number pattern.

Given five multiplication problems in which the multiplicand is a three digit and the multiplier a two digit whole number, 90% of the students will be able to solve four of the problems.

Given five division problems in which the dividend is more than three digits and a two digit divisor, 90% of the students will solve four of the problems correctly.

Given five sets of whole numbers, 90% of the students will be able to compute the average, range, and median for each set with 80% accuracy.

Given three pair of numbers, 90% of the students will be able to list the factors of each number and name the "greatest common factor" with an accuracy of 66 2/3%.

Given five pair of numbers less than thirty, 90% of the students will be able to list the multiples of each number and name the "least common multiple" with an accuracy of 80%

Given a list of five numbers less than fifty, 90% of the students will be able to name that number as a product of prime factors with an accuracy of 80%.

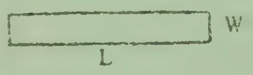
Given five addition and five subtraction problems composed of mixed numbers with unlik denominators, 90% of the students will be able to solve eight of the problems.

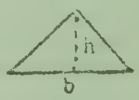
Given five pair of mixed fractions, 90% of the students will be able to name the product with an accuracy of at least four correct.

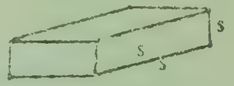
Given five pair of fractions, 90% of the students will be able to divide the fractions with an accuracy of at least four correct.

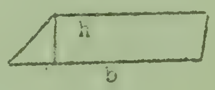
Given the following list of terms, 90% of the students will be able to match at least eight of the terms with their definitions: point, ray, plane, protractor, right angle, perpendicular, diameter, radius, diagonal, area.

Given the following figures, 90% of the students will be able to match at least three of the figures with the correct formula for computing the area.









Given a sheet of graph paper and the highest and lowest temperatures for each day of a week in December, 90% of the students will be able to construct a double bar graph from the set of data

Given five closed surfaces with dimensions, 90% of the students will be able to name th “surface area.” of four of the closed surfaces.

LEVEL F:

Given a number sentence such as $n < 4$, 90% of the students will be able to write a correct solution set of whole numbers.

Given four triangles, 90% of the students will be able to identify a congruent pair

Given a set of five numerals, 90% of the students will be able to determine the mode

Given five perfect squares less than 144, 90% of the students will be able to compute the square root of four of them.

Given a circle, square, and triangle, 90% of the students will be able to tell which plane figure has a circumference.

Using a protractor and compass, 90% of the students will be able to accurately construct a perpendicular bisector of a line segment.

Given a triangle, rectangle, parrallelogram, and rhombus, 90% of the students will be able to identify the rhombus.

Given four triangles, 90% of the students will be able to identify an isosceles triangle and n equilateral triangle.

Given four sets of intersecting line segments, 90% of the students will be able to identify hich pair is perpendicular.

Given a set of fraction numerals and mixed fraction numerals to thousands, 90% of the udents will be able to convert these to decimal fractions.

Given five addition and subtraction problems involving decimal fractions to hundredths % of the students will be able to correctly solve four of each type.

Given five multiplication problems using multipliers and multiplicands of tenths, hun- edths and thousandths, 90% of the students will be able to correctly solve four of them

Given five problems using decimal fractions, 90% of the students will be able to con- t a decimal fraction to a percent and then correctly compute the percentage of a whole mber with an accuracy of four out of the five problems. Example: .30 = 30% 30% of 50 = 15.

PROGRAM DATA SHEET

Program Title: Guidance, Testing and Psychological Services
Program Level: V
Program Code: 3042
Fund: General
Location: District

RESOURCE REQUIREMENTS	1970-71		1971-72	1972-73	1973-74	1974-75
	QTY.	AMOUNT				
1. Estimated A.D.A.						
2. Teacher Position						
3. Certificated Salaries	1.00	15,938				
4. Classified Salaries	.35	2,760				
5. Employee Benefits		1,230				
6. Books & Supplies		2,820				
7. Support Prog. Service						
8. Other Services		2,550				
9. Other Outgo						
10. Sub-Total		25,298				
11. Cost/ADA (Line 10)						
12. Projected Cost Increase/ADA						
13. Projected ADA Cost						
14. Projected ADA						
15. Projected Cost						
16. Equipment Replacement						
17. Capital Outlay		250				
18. Total Projected		25,548				
REVENUE SOURCES:						
19. Federal		2				
20. State		9,123				
21. County		82				
22. Local		16,341				
23. TOTAL		25,548				

PPBS PROGRAM DESCRIPTION PACKAGE

Description, Goals, Objectives, Criteria, Evaluation

PROGRAM ELEMENT DESCRIPTION

Title: Guidance, Testing and Psychological Level: V Program Number: 3012

NARRATIVE

This program includes those aspects of services to pupils which aid the pupil, the parent, and the school in their respective efforts to assure maximum utilization of the pupil's potential for achievement in intellectual, social, and personal-psychological development. Primarily these are testing-evaluation, attendance, and psychological services.

GOAL STATEMENTS

1. To provide psychological services for identification and placement of exceptional pupils (educable mentally retarded, educationally handicapped, gifted, etc.); for counseling with pupils, parents, and staff about individual pupil or behavior and/or educational problems; for consultation concerning relevant psychological data sources in development and implementation of instructional programs.

2. To promote regular pupil attendance and to maintain and prepare necessary pupil attendance records and reports.

3. To provide district-wide testing and evaluation services including:

    a. state mandated testing.

    b. such additional group testing as the district may determine to be relevant to the evaluation of its objective.

    c. development of district-normed evaluative techniques and instruments.

OBJECTIVES (Behavioral/Performance and Criteria)

Attendance and Welfare Services

1. All required attendance reports will be submitted on time.

2. A home contact will be made by the principal or attendance supervisor in each instance where a pupil is absent more than four (4) days in any school month.

3. The final ADA for any year (exclusive of summer school) shall be no less than 96.5% of the year end enrollment.

Testing and Evaluation Services

1. All mandated state testing shall be completed with 99% of the required students teste
2. The plan of evaluation to determine program effectiveness will be completed yearly at 100% level.

Psychological Services

1. All referrals for special placement shall be processed within a four (4) week time perio
2. Given all students referred for psychological services, 50% of these students will be evaluated by the building principal as improved on a follow-up form which shall be filed five months after the original diagnosis.

EVALUATION METHODS/TOOLS

1. Review of appropriate records by psychologist and/or Superintendent.

LEVEL CODE	LEVEL		BUDGET	REQUISITION ENCUMBRANCE	ENCUMBRANCE	EXPENDITURE	BALANCE
9	NON LEVEL						
690.00	OTHER EXPENSES						
	020	EMBLEM	4,996.67	.00	89.60	17.54	4,889.53
	030	HIGHLANDS	4,996.67	.00	76.40	38.30	4,881.47
	040	HONBY	4,996.67	.00	66.55	249.30	4,680.82
	050	RIO VISTA	4,996.67	.00	55.80	68.20	4,872.67
	060	ROSEDELL	4,996.67	.00	56.40	67.20	4,873.07
	070	SANTA CLARITA	4,996.66	.00	62.80	69.10	4,864.76
	080	SAUGUS	4,996.66	.00	47.80	27.80	4,921.06
	090	SKYBLUE MESA	4,996.66	.00	55.80	440.90	4,499.96
	200	DISTRICT OFFICE	67,530.00	.00	1,564.17	39,798.96	26,166.87
			112,500.00	.00	2,097.32	41,040.35	69,362.33
720.00	CLASSIFIED SALARIES						
	010	CEDARCREEK	2,934.16	.00	.00	.00	2,934.16
	020	EMBLEM	2,934.16	.00	.00	.00	2,934.16
	030	HIGHLANDS	2,934.16	.00	.00	.00	2,934.16
	040	HONBY	2,934.16	.00	.00	.00	2,934.16
	050	RIO VISTA	2,934.16	.00	.00	.00	2,934.16
	060	ROSEDELL	2,934.16	.00	.00	.00	2,934.16
	070	SANTA CLARITA	2,934.16	.00	.00	.00	2,934.16
	080	SAUGUS	2,934.16	.00	.00	.00	2,934.16
	090	SKYBLUE MESA	2,934.16	.00	.00	.00	2,934.16
	200	DISTRICT OFFICE	2,934.16	.00	.00	.00	2,934.16
			29,341.60	.00	.00	.00	29,341.60
730.00	REPLACEMENT OF EQUIPMENT						
	010	CEDARCREEK	1,096.32	.00	.00	.00	1,096.32
	040	HONBY	408.00	26.38	123.44	.00	258.18
	050	RIO VISTA	50.00	.00	.00	.00	50.00
	080	SAUGUS	89.68	.00	89.68	.00	.00
	200	DISTRICT OFFICE	68.00	.00	.00	.00	68.00
			1,712.00	26.38	213.12	.00	1,472.50
790.00	OTHER EXPENSES						
	010	CEDARCREEK	2,620.00	.00	140.69	188.16	2,291.15
	020	EMBLEM	2,620.00	.00	1,645.46	71.50	903.04
	030	HIGHLANDS	2,620.00	.00	104.13	507.82	2,008.05
	040	HONBY	2,620.00	.00	80.75	199.87	2,339.38
	050	RIO VISTA	2,620.00	.00	463.63	367.57	1,788.80
	060	ROSEDELL	2,620.00	4.40	2,769.49	814.03	967.92CR
	070	SANTA CLARITA	2,620.00	.00	36.88	103.21	2,479.91
	080	SAUGUS	2,620.00	.00	29.75	191.18	2,399.07
	090	SKYBLUE MESA	2,620.00	.00	139.22	388.02	2,092.76

PROGRAM CODE		BUDGET	REQUISITION ENCUMBRANCE	ENCUMBRANCE	EXPENDITURE	BALANCE
1000	INSTRUCTION					
211.00	PRINCIPALS SALARIES					
	010 CEDARCREEK	17,594.10	.00	.00	.00	17,594.10
	020 EMBLEM	7,016.69	.00	.00	.00	7,016.69
	030 HIGHLANDS	20,662.40	.00	.00	.00	20,662.40
	040 HONBY	19,296.20	.00	.00	.00	19,295.28
	050 RIO VISTA	19,296.28	.00	.00	.00	19,296.28
	060 ROSEDELL	17,541.72	.00	.00	.00	17,541.72
	070 SANTA CLARITA	19,296.28	.00	.00	.00	19,296.28
	080 SAUGUS	7,016.69	.00	.00	.00	7,016.69
	090 SKYBLUE MESA	18,126.20	.00	.00	.00	18,126.20
		145,846.64	.00	.00	.00	145,846.64 *
220.00	CLASSIFIED SALARIES					
	010 CEDARCREEK	7,123.46	.00	.00	.00	7,123.46
	020 EMBLEM	4,352.14	.00	.00	.00	4,362.14
	030 HIGHLANDS	7,612.16	.00	.00	.00	7,612.16
	040 HONBY	6,743.32	.00	.00	.00	6,743.32
	050 RIO VISTA	7,123.30	.00	.00	.00	7,123.30
	060 ROSEDELL	7,018.32	.00	.00	.00	7,018.32
	070 SANTA CLARITA	6,353.00	.00	.00	.00	6,353.00
	080 SAUGUS	5,742.80	.00	.00	.00	5,742.80
	090 SKYBLUE MESA	5,972.86	.00	.00	.00	5,972.86
		58,051.36	.00	.00	.00	58,051.36 *
230.00	TEXTBOOKS					
	010 CEDARCREEK	298.00	.00	.00	.00	298.00
	020 EMBLEM	100.00	.00	.00	.00	100.00
	030 HIGHLANDS	850.00	.00	.00	244.45	605.55
	040 HONBY	500.00	.00	.00	.00	500.00
	050 RIO VISTA	50.00	.00	.00	.00	50.00
	060 ROSEDELL	150.00	.00	.00	.00	150.00
	070 SANTA CLARITA	450.00	.00	.00	.00	450.00
	080 SAUGUS	321.75	.00	.00	.00	321.75
	090 SKYBLUE MESA	305.00	.00	206.01	.00	98.99
		3,024.75	.00	206.01	244.45	2,574.29 *
240.00	SUPPLEMENTAL BOOKS					
	010 CEDARCREEK	50.00	91.00	25.43	.00	66.43CR
	020 EMBLEM	42.00	.00	.00	.00	42.00
	030 HIGHLANDS	975.00	137.31	6.86	436.86	393.47
	040 HONBY	145.00	.00	.00	.00	145.00
	050 RIO VISTA	976.00	.00	8.70	106.23	861.02
	060 ROSEDELL	100.00	99.00	15.83	103.10	117.93CR
	070 SANTA CLARITA	50.00	.00	.00	.00	50.00
					.00	500.00

IV-

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PROGRAM                                                       REQUISITION
CODE                                           BUDGET         ENCUMBRANCE     ENCUMBRANCE     EXPENDITURE        BALANCE

1222     E. H.

     211.00    PRINCIPALS SALARIES
               200   DISTRICT OFFICE         1,754.17             .00             .00             .00          1,754.17

                                             1,754.17             .00             .00             .00          1,754.17  *

     213.00    TEACHERS SALARIES
               200   DISTRICT OFFICE        14,500.00             .00             .00             .00         14,500.00

                                            14,500.00             .00             .00             .00         14,500.00  *

     220.00    CLASSIFIED SALARIES
               200   DISTRICT OFFICE           690.33             .00             .00             .00            690.33

                                               690.33             .00             .00             .00            690.33  *

     230.00    TEXTBOOKS
               200   DISTRICT OFFICE            50.00             .00             .00             .00             50.00

                                                50.00             .00             .00             .00             50.00  *

     240.00    SUPPLEMENTAL BOOKS
               200   DISTRICT OFFICE           115.00             .00             .00             .00            115.00

                                               115.00             .00             .00             .00            115.00  *

     290.00    OTHER EXPENSES
               200   DISTRICT OFFICE           825.00          300.00            4.75             .00            520.25

                                               825.00          300.00            4.75             .00            520.25  *

    1261.00    BOOKS-LIBRARY (GENERAL FUND)
               200   DISTRICT OFFICE           250.00             .00             .00             .00            250.00

                                               250.00             .00             .00             .00            250.00  *

    1269.00    EQUIPMENT (GENERAL FUND)
               200   DISTRICT OFFICE           545.00             .00             .00             .00            545.00

                                               545.00             .00             .00             .00            545.00  *

                                            18,729.50          300.00            4.75             .00         18,424.75  **
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EDUCATIONAL MANAGEMENT
SPECIALISTS INC.

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SAUGUS SCHOOL DISTRICT                                         BUDGET MASTER LIST      11/30/70                                                        PAGE    4

DESCRIPTION    REQ WORK   DATE  ----BUDGET NUMBER----       BGT AMT       REVISED          ENCUM          UNENCUM            EXPEND      REQ ENCUM

AP                    .00 07/01/0 070 10 9 1000 0211.00     19,296.23     19,296.23          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1000 0220.00      6,353.00      6,353.00          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1000 0230.00        450.00        450.00          .00             .00               .00         .00
A                     .00 07/01/0 070 10 9 1000 0240.00         50.00         50.00          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1000 0290.00      5,730.00      5,730.00          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1000 1250.00      3,470.15      3,470.15          .00             .00               .00         .00
A                     .00 07/01/0 070 10 9 1000 1261.00        900.00        900.00          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1000 1269.00      1,255.00      1,255.00          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1101 0213.00      5,046.45      5,046.45          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1102 0213.00      5,046.45      5,046.45          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1103 0213.00     25,232.25     25,232.25          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1104 0213.00     25,232.25     25,232.25          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1105 0213.00      6,728.60      6,728.60          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1106 0213.00     50,464.50     50,464.50          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1107 0213.00      8,410.75      8,410.75          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1108 0213.00     11,775.05     11,775.05          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1109 0213.00     21,867.05     21,867.05          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 1111 0213.00      8,410.75      8,410.75          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 4050 0620.00     16,912.84     16,912.84          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 4050 0690.00      4,996.66      4,996.66          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 4051 0720.00      2,934.16      2,934.16          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 4051 0790.00      2,620.00      2,620.00          .00             .00               .00         .00
AP                    .00 07/01/0 070 10 9 4052 1240.00        453.12        453.12          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1000 0211.00      7,016.69      7,016.69          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1000 0220.00      5,742.80      5,742.80          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1000 0230.00        321.75        321.75          .00             .00               .00         .00
A                     .00 07/01/0 080 10 9 1000 0240.00        500.00        500.00          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1000 0290.00      5,178.00      5,178.00          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1000 0730.00         89.68         89.68          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1000 1250.00      1,492.74      1,492.74          .00             .00               .00         .00
A                     .00 07/01/0 080 10 9 1000 1261.00        750.00        750.00          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1000 1269.00        600.00        600.00          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1101 0213.00      4,323.60      4,323.60          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1102 0213.00      4,323.60      4,323.60          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1103 0213.00     21,618.00     21,618.00          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1104 0213.00     21,618.00     21,618.00          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1105 0213.00      5,764.80      5,764.80          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1106 0213.00     43,236.00     43,236.00          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1107 0213.00      7,206.00      7,206.00          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1108 0213.00     10,088.40     10,088.40          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1109 0213.00     18,735.60     18,735.60          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 1110 0213.00      7,206.00      7,206.00          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 4050 0620.00     16,912.84     16,912.84          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 4050 0690.00      4,936.66      4,936.66          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 4051 0720.00      2,934.15      2,934.15          .00             .00               .00         .00
AP                    .00 07/01/0 080 10 9 4051 0790.00      2,620.00      2,620.00          .00             .00               .00         .00
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SAUGUS SCHOOL DISTRICT                         BUDGET REPORT NO. 1                     12/21/70                    PAGE

                                                            REQUISITION
                                                 BUDGET     ENCUMBRANCE     ENCUMBRANCE     EXPENDITURE       BALANCE

060  ROSEDELL

1000  INSTRUCTION

0290.00 OTHER EXPENSES
        REQUISITION           5212 RQ  20157       .00         2.80             .00             .00
        PURCHASE ORDER        5384 PM   1277       .00          .00          391.62             .00
        PURCHASE ORDER        5388 PM   1291       .00          .00           80.23             .00
        PURCHASE ORDER        5387 PM   1290       .00          .00           17.09             .00
        PURCHASE ORDER        5386 PM   1279       .00          .00           36.40             .00
        PURCHASE ORDER        5383 PM   1278       .00          .00           33.76             .00
        PURCHASE ORDER        5362 PM   1244       .00          .00          296.72             .00
        PURCHASE ORDER        5203 PM   1271       .00          .00            6.27             .00
        PURCHASE ORDER        5374 PM   1272       .00          .00            5.22             .00
        OFFICE SUPPLIES     800022 RQ  20039       .00       300.00             .00             .00
        PRINTING            900040 RQ  20107       .00       300.00             .00             .00
        POSTAGE             900041 RQ  20098       .00        85.00             .00             .00
        SCHOOL SUPPLIES [illegible]                .00     4,380.00             .00             .00
        REQUISITION           5203 RQ  20145       .00        91.50             .00             .00
        OTHER EXPENSE INSTR 999999 PM  10501       .00          .00           19.53             .00
        OTHER EXPENSE INSTR 999999 PM  10492       .00          .00           15.28             .00
        OTHER EXPENSE INST  999999 PM  12176       .00          .00           32.59             .00
        OTHER EXPENSE INSTR 999999 PM  10511       .00          .00           62.48             .00
        OTHER EXPENSE INST  999999 PM  11504       .00          .00            8.55             .00
        OTHER EXPENSE INSTR 999999 PM  10531       .00          .00           56.70             .00
        OTHER EXPENSE INSTR 999999 PM  10521       .00          .00           13.80             .00
        OTHER EXPENSE INSTR 999999 PM  10471       .00          .00          103.16             .00
        OTHER EXPENSE INSTR 999999 PM  10461       .00          .00          100.64             .00
        OTHER EXPENSE INSTR 999999 PM  10481       .00          .00          118.31             .00
        OTHER EXPENSE INSTR 999999 PM  10541       .00          .00           17.43             .00
        OTHER EXPENSE INSTR 999999 PM  10532       .00          .00           56.70             .00
        OTHER EXPENSE INST      12 IN  11504       .00          .00            8.55 CR        16.32
        OTHER EXPENSE INSTR     63 IN  10492       .00          .00           15.28 CR        15.74
        OTHER EXPENSE INSTR     82 IN  10471       .00          .00          103.16 CR       107.91
        INVOICE                105 IN   1271       .00          .00             .00            2.39
        INVOICE                105 IN   1271       .00          .00             .00            1.22
        INVOICE                105 IN   1271       .00          .00            6.27 CR         3.49
        OTHER EXPENSE INSTR     75 IN  10541       .00          .00           17.43 CR        14.89
        OTHER EXPENSE INST     101 IN  12176       .00          .00           32.59 CR        32.59
        OTHER EXPENSE INSTR    126 IN   9511       .00          .00           30.00 CR        30.00
        OTHER EXPENSE INSTR    109 IN   9892       .00          .00           11.95 CR        11.95
        OTHER EXPENSE INSTR     93 IN  10511       .00          .00           55.15 CR        65.58
        OTHER EXPENSE INSTR     39 IN  10461       .00          .00          100.64 CR       101.12
        INVOICE                 84 IN   1279       .00          .00           34.76 CR       266.96
        OTHER EXPENSE INSTR    106 IN  10521       .00          .00           13.80 CR        13.80
        OTHER EXPENSE INSTR    149 IN  10591       .00          .00           56.70 CR        58.51
        OTHER EXPENSE INSTR    147 IN  10532       .00          .00           56.70 CR        58.51
        OTHER EXPENSE INSTR    144 IN [illegible]  .00          .00          118.31 CR       123.65
        OTHER EXPENSE INSTR    151 IN  10501       .00          .00           19.53 CR        20.95
        OTHER EXPENSE INSTR    181 IN  10511       .00          .00            7.33 CR         7.33

             BUDGET CLASS TOTAL             $8,500.00    $6,679.60       $1,719.67         $973.32         $872.59

1240.00 IMPROVEMENT OF SITES                  $800.00         $.00            $.00            $.00         [illegible]
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EDUCATIONAL MANAGEMENT
SPECIALISTS, INC.

SAUGUS SCHOOL DISTRICT　　BUDGET REPORT NO 4　　DATE 12/21/70　　PAGE 2

FUND CODE		BUDGET	REQUISITION ENCUMBRANCE	ENCUMBRANCE	EXPENDITURE	BALANCE	
10	GENERAL FUND						
220.00	CLASSIFIED SALARIES						
	9 NON LEVEL	62,993.34	.00	.00	.00	62,993.34	
		62,993.34	.00	.00	.00	62,993.34	*
		62,993.34	.00	.00	.00	62,993.34	**
230.00	TEXTBOOKS 9 NON LEVEL	3,324.75	.00	206.01	244.45	2,874.29	
		3,324.75	.00	206.01	244.45	2,874.29	*
		3,324.75	.00	206.01	244.45	2,874.29	**
240.00	SUPPLEMENTAL BOOKS 9 NON LEVEL	3,627.00	350.71	135.85	919.73	2,220.71	
		3,627.00	350.71	135.85	919.73	2,220.71	*
		3,627.00	350.71	135.85	919.73	2,220.71	**
290.00	OTHER EXPENSES 9 NON LEVEL	116,697.00	49,628.22	21,343.82	31,068.68	14,656.28	
		116,697.00	49,628.22	21,343.82	31,068.68	14,656.28	*
		116,697.00	49,628.22	21,343.82	31,068.68	14,656.28	**
		2,025,219.67	49,978.93	21,685.68	32,232.86	1,921,322.20	***
490.00	OTHER EXPENSES 9 NON LEVEL	3,000.00	.00	.00	925.81	2,074.19	
		3,000.00	.00	.00	925.81	2,074.19	*
		3,000.00	.00	.00	925.81	2,074.19	**
		3,000.00	.00	.00	925.81	2,074.19	***

APPENDIX E

THE TORRANCE UNIFIED SCHOOL DISTRICT

OVERALL

The Torrance School District, located in the Los Angeles metropolitan area, has a total enrolment of 35,000 pupils in 42 schools with a staff of 2,200. In the spring of 1970, the Torrance Board of Education adopted a recommendation by its staff that the school district should participate in a pilot project being directed by the California State Legislature's Advisory Commission on School District Budgeting and Accounting. The aim of this project is to design and test operationally a planning, programming, budgeting system; to this end 14 school districts are cooperating with an independent consulting firm.

At least two important factors contributed to the decision for the Torrance School District to take part in the PPBES pilot project. First, for two years previous, a number of school district staff had gained valuable experience in developing and utilizing instructional goals and objectives for a reading program in some local kindergartens. Second, some key district office personnel, led by the Assistant Superintendent - Business, have a strong commitment to better planning and evaluation in education.

Although it is anticipated that a complete PPBE System will eventually be implemented in the Torrance School District, the immediate aim is to develop goals and objectives for both instructional and non-instructional programs. This approach is in sharp contrast to that taken by school districts, whose first objective in implementing PPBES is to develop a program accounting system. The rationale for the approach taken in Torrance is that PPBES cannot be successfully implemented unless it has the support of teachers. It is felt that the support and confidence of teachers will be much more likely if the emphasis, especially initially, is placed on planning and programming rather than on budgeting and accounting.

No school district personnel have been assigned for full-time work with PPBES and budgeted expenditures amount to less than $10,000 per annum. The responsibility for directing and coordinating the implementation of PPBES in the school district has been given to a 42-member Task Force drawn from the central office, schools, and the community at large. It is interesting to note that the initiative for moving the present phase of the work forward of articulating goals and objectives is with the teachers; central office personnel acting as consultants only on request. Thus except for major involvement in the early stages for the purpose of providing in-service training to teachers and community participants, central office personnel have chosen to play a more supportive than directive role in PPBES.

GOALS AND OBJECTIVES

The work of developing broad district goals was delegated to a sub-committee of the school district's 42-member task force. Assisted by a tentative set of goals drawn up by the directors of curriculum in an attempt to avoid unnecessary duplication, the committee developed a goals statement which was then sent to a variety of groups for reaction: Parent Teacher Association's, high school student councils, teachers, and community organizations. Responses to the draft goal statement were summarized and edited by a writing sub-committee before being presented to the board of education for adoption. Following adoption by the board the goals statement was further publicized in the community. At the present time, the goals are being further reviewed by a number of citizens advisory committees. A copy of the goals statement, as adopted by the board of education, is shown in the Addendum to this Appendix. The statement reflects the values and philosophy of a white American middle-class community and indicates that the work of the committee was directed more to identifying, collecting, and synthesizing existing goals than to creating new ones.

It should be noted that, although a period of nine months elapsed between the formation of the goals sub-committee and the final adoption of the goals statment by the board, the sub-committee developed its goals in three sessions over a period of two months. The ground-work done by the directors of curriculum could well account for the task being achieved in such an incredibly short time. It is also worthwhile noting that the difficulties which were encountered in obtaining adequate community involvement on the goals committee (most of its members came from "the educational establishment") have led to that committee's being dissolved and efforts being made to obtain community involvement at the school rather than district level. Thus it is hoped that in addition to district-wide goals, each school might ultimately have its own distinctive goals, reflecting the values and aspirations of the community it serves.

Simultaneously with the work of the district goals committee, other groups have been involved in developing specific goals and objectives for both the instructional and non-instructional programs. With respect to the instructional program, the work is being coordinated by a committee of teachers, who, after receiving in-service training in the writing of goals and objectives from district office staff, in turn have transmitted these skills to their fellow teachers. In the first year of the project, four days for in-service training of this kind were authorized by the board. The work of developing an initial set of instructional goals and performance objectives was completed during the summer vacation, and for this teachers were given extra pay.

At the present time the major emphasis is on refining the initial goals and performance objectives for the high school instructional program and ensuring that they are compatible with the district goals which have already been established. This work is being undertaken by the teachers of the district under the coordination of a committee which is representative of schools and major subject areas, with district office personnel acting as consultants where required. Release-time for this work is provided on four days in the current year when schools close at noon. Some examples of goals and performance objectives on a subject area basis are given in the Addendum.

PROGRAM STRUCTURE

A program structure, compatible with the one developed by the state-wide PPBES pilot project, has been developed by the district office staff. It is curriculum-based, has six levels and describes only the instructional program of the school district. Whereas the program structure does facilitate the budgeting process, as yet it has not become the basis for the accounting system.

ANALYSIS

Because the Torrance School District is still in the early planning phase of the PPBE process, i.e., the development of goals and objectives, no work has yet begun on the programming and budgeting phases of the process: identifying alternatives for achieving specified goals and objectives, costing and measuring the effectiveness of these alternatives, and finally selecting the best one. District office personnel recognize that these activities are essential to any PPBE System and indicate that they will be implemented later. At the present time, however, there is not a written plan for the implementation of the PPBES concept. Nevertheless, it is interesting to note that some of the concepts and processes involved in the programming and budgeting phases of PPBES has been employed by some of the district's special education staff in carrying out a systems analysis of the speech therapy program in the elementary school.

INFORMATION BASE

The school district has owned a small computer for a number of years and has built up a significant data base in certain areas, e.g., personnel qualifications and assignments, pupil characteristics and achievements, stock inventories. Therefore in some areas the district had an adequate information base prior to beginning to implement PPBES. Considerable work will be required, however, to expand the base to make it adequate for PPBES and to acquire the necessary additional hardware and software. For example, it was noted that bookkeeping machines rather than the computer were used for financial accounting in the school district.

CONCLUSION

The Torrance School District is at a very early stage in implementing PPBES and much work has still to be done before the system is fully developed and implemented. Unlike many other districts Torrance has chosen to enter the PPBES cycle at the planning and programming stage rather than at the budgeting and accounting stage. This approach has assisted in gaining teacher support and the heavy teacher and community involvement and participation in the implementation of PPBES to date augurs well for the future success of the project.

TORRANCE UNIFIED SCHOOL DISTRICT
EDUCATIONAL GOALS

Revised: February, 1970

GOALS STATEMENT

INTELLECTUAL COMPETENCE Torrance schools should:

. . . Provide a curriculum to meet the needs of all students.

. . . Be provided with teaching facilities adequate and flexible enough to meet the needs of a
odern educational program.

. . . Show evidence of being broad, flexible, and adequate at the elementary, middle, and senior
gh levels, with the provision that all students gain knowledge of basic fundamentals in English,
athematics, social sciences, and science in the early elementary grades, to be expanded by further
udy as students progress.

. . . Provide opportunities for each student to gain access to the accumulated knowledge and
lture of man and to the mechanics of locating needed information and assistance.

. . . Utilize fully all available educational resources.

. . . Have a well organized guidance program which is an integral part of the educational
ogram, basic to individual planning at all levels, and which includes a well defined, long-range
ogram of testing and evaluation at all levels.

. . . Aid each student to develop powers of constructive and critical thinking, solve problems,
d to accept responsibility for self-evaluation.

. . . Encourage the professional staff to maintain an up-to-date level of competence in their
oject matter fields and in teaching techniques.

ECONOMIC AND VOCATIONAL COMPETENCE Torrance schools should:

. . . Teach students to be aware of the place of vocations in society and the interdependence of
s and professions.

. . . Provide all possible opportunities to develop special vocational interests and skills, which
l help them find employment.

. . . Offer guidance and counseling to help every student with present and future planning.

. . . Instruct students to utilize their talents in obtaining and holding a job.

. . . Assist all students to understand how to function effectively in a rapidly changing
erican economic system.

3. CITIZENSHIP AND CIVIC RESPONSIBILITY Torrance schools should:

...Provide all students those citizenship experiences which emphasize the American heritage and encourage students to assume responsibilities of citizenship.

...Stress the development of those behaviors which recognize the legal, civilized, and orderly process of democratic social change.

4. COMPETENCE IN HUMAN AND SOCIAL RELATIONS Torrance schools should:

...Teach each student to understand his responsibilities to his immediate and expanding environment.

...Emphasize the importance of social skills and recognition of the family as a basic social institution.

...Help to develop in all students a respect for the rights of others as individuals and as groups.

5. MORAL AND ETHICAL VALUES Torrance schools should:

...Assist in the development of ethical standards of conduct and basic integrity.

6. SELF-REALIZATION AND MENTAL AND PHYSICAL HEALTH Torrance schools should:

...Provide opportunities and encouragement for each student to be creative in one or more fields of endeavor.

...Help every student attain good physical, mental health, and safety habits.

...Provide encouragement for the worthy use of leisure time.

MODEL III

HOME ECONOMICS

GOAL: The students in clothing classes will know how to read and apply skills as directed by pattern guides.

OBJECTIVES: Using a selected skirt pattern the student will be able to fit, lay out, cut, mark, and construct following the pattern guide.

BOYS' ATHLETICS

GOAL: All boys shall have the opportunity to grow to their potential in one or more fields of athletics.

OBJECTIVES: Upon completion of 9th grade wrestling the student will be able to:

1. Execute two types of take-downs
2. Demonstrate a reversal and an escape
3. Perform a breakdown into a pinning combination.

SCIENCE - ECOLOGY

GOAL: All students shall know the basic concepts of physical and biotic scientific investigation.

OBJECTIVES: (Sample objective only) Upon completion of the course the student will be able, when given a list of ten statements or diagrams, to identify the three types of levers.

MUSIC APPRECIATION

GOAL: Appreciate and enjoy identified types of music.

OBJECTIVES: From selections of classical, jazz, swing, western, and modern the student will select two of three for voluntary listening at a listening post.

Upon completion the student will be able to:

1. Identify classical, jazz, swing and modern music by matching titles with types of music.
2. Differentiate between kinds of music he likes and does not like and identify reasons for his opinions.

MODEL II

WOODSHOP I

GOAL: The student will have the opportunity to develop skills in the Industrial Arts

OBJECTIVES: From a display of 15 hand tools the student will orally identify and describe correctly the use of each one.

The student, upon completion of the safety unit, will pa a teacher-constructed objective test with 85% accuracy.

The student will design and construct a project which meets the course standards using the basic tools of Woodshop I.

The student will list and demonstrate the seven steps in using a plane.

The student will identify the safety features of all pow machines.

The student will be able to list the 11 basic steps in building a foot stool or other appropriate projects.

PROGRAM DESCRIPTION: Woodshop I is a one-year course which meets daily for 50 minutes. Instruction is provided in the classroom through the use of textbooks, films, lectures, demonstrations, models, etc. Laboratory experience is provided in the shop which is equipped with basic hand tools, portable and fixed power tools, and appropriate material and supplies necessary for completion of projec

MODEL I

WOODWORKING

GOAL:	Students will develop skills in using tools and machines to construct objects made of wood.
OBJECTIVES:	Upon completion of Woodshop I students will measure and cut accurately to a tolerance of 1/64 of an inch, a specified size of lumber on the circular saw.
PROGRAM DESCRIPTION:	Woodshop I is a one-year introductory course available to all students, Grades 9 thru 12. Students receive basic instruction and training in the maintenance and operation, within State prescribed safety standards, of the circular saw, jointer, planer, wood lathe, band saw, sanders, electric hand tools, and all related hand tools. Four class sessions per week are spent working with tools and materials in the shop area and one session per week includes classroom instruction on project planning and use and identification of materials. Students are required to complete a minimum of two projects.

GUIDELINE DRAFT FOR TORRANCE GOALS COMMITTEE

DEFINITIONS TO ASSIST IN THE FORMULATION OF SCHOOL DISTRICT PHILOSOPHY, GOALS, AND OBJECTIVES STATEMENTS

The definitions listed below are not intended to be exclusive of one another. Indeed, it would be difficult to consider goals for a school district without being aware of the overall district philosophy and likewise difficult to divorce goals from their relationship to specific curriculum or classroom objectives.

These separate definitions have a useful function in that they can aid discussions regarding each particular area as, for instance, when a school district is attempting to spell out its goals. Accompanying each definition is a series of examples that are representative of the categories, but are not designed to be an exhaustive list of items which a district might believe or profess. Obviously, a district may have a highly diversified philosophical statement as well as many goals and objectives.

PHILOSOPHY

Definition: A statement of principles based upon beliefs, concepts, and attitudes from which the educational direction of the district is derived.

Some Examples:

- We believe that our schools exist to provide a good program of general education to aid all students to become effective citizens in a democracy.
- We believe that the schools should foster optimum individual development in various aspects of living: mental, physical, social, and moral.
- We believe that the schools exist for the transmission of culture to our youth and also to aid them in developing an improved culture.

GOALS

Definition: A goal is a broad, general statement that proposes desired and valued competencies, states of being, and/or general levels of proficiency to be achieved. A goal is general and timeless. It is not concerned with a specific accomplishment within a highly defined time period. The goals provide basic guidance for all activities in the district.

Some Examples:

- All students should develop skills in ways of acquiring and transmitting knowledge.
- All students shall be well informed and possess knowledge about the structures, processes, and functions of government.

- All graduates should be prepared for and select a vocation.
- To provide quality education that will help every child acquire the habits and attitudes associated with responsible citizenship.
- To provide quality education that will help every child acquire the greatest possible understanding of himself and an appreciation of his worthiness as a member of society.
- To provide quality education that will help every child acquire to the fullest extent possible for him mastery of the basic skills in the use of words and numbers.
- To provide quality education that will give every child opportunity and encouragement to be creative in one or more fields of endeavor.
- To develop individuals who, in terms of their potential . . .
  - Can appreciate and understand the many forms in which communication occurs (verbal, nonverbal) and who can communicate (read, write, listen, speak, view, act) effectively and with understanding.
  - Have fundamental skills and understanding enabling them to meet and solve problems qualitatively as well as quantitatively.
  - Appreciate the value of the sciences and understand the purposes and methods of sciences (observation, experimentation, recording analysis, prediction).
  - Can make realistic appraisal of their interests, aptitudes, and achievements.

OBJECTIVES

Definition: An objective is defined as a quantifiable and/or observable achievement accomplished within a specifiable time period. Objectives should reflect the critical factors required for the achievement of a goal. An objective is more specifically stated than a goal.

Some Examples:

- Given a daily newspaper, the student will be able to analyze three of the front page stories and write a topic outline for these articles within a two-hour period.
- Given the names of the current local, state, and federal representatives from his area, the student will be able to state, within fifteen minutes, the office held by each.
- Given the description of a job opening for which he may be qualified, the student will be able within an hour to write an acceptable application letter. (Qualities of "acceptable" to be spelled out in advance.)
- Upon completion of the term, a sixth grade student will be able to read and pronounce with 80% accuracy a list of sixth grade words selected from the basic Stanford Achievement Test — Reading.

- Upon completion of the term, 60% of eleventh grade students will score at least at the Los Angeles County average on standardized tests on reading comprehension.

- By the end of the eighth grade, the student will read and pronounce ten lists of eighth grade words selected from a basal reading text.

- By the end of the eighth grade, the student is able to complete a written research composition with technical accuracy using criteria specified within an eighth grade English text.

- By the end of the eighth grade, the student will use the tools of geometry and measurements in problem solving and geometrical construction (e.g., compass, straight edge, protractor, ruler, clock, money, maps).

- All graduates should be prepared for and select a vocation.
- To provide quality education that will help every child acquire the habits and attitudes associated with responsible citizenship.
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C. Implementation Plan

1. Establish Coordination Committee
2. Develop Staff Training Program
3. Initiate Planning Phase
4. Development of Goals and Objectives by Program and Activity Managers and/or Responsibility Centers
5. Develop Program Structure
6. Develop Budget Crosswalk
7. Analyze, Review and Revise Planning Accomplishments
8. Initiate Formal Evaluation Phase
9. Complete Implementation of Program Budget on Pilot Basis

REPORT OF GROUP 2:

This group represented school districts of approximately 10,000 students, having more flexibility in staff assignments than many districts and earnestly seeking better ways to serve the students in their schools. Before implementation of an ERMS program one must be prepared to answer such questions as these that follow:

1. Is there a state mandate or direction being offered by the state department of education? (California only state giving direction)
2. What is the problem with the present budget and methods of accountability?
3. How do you justify costs of the new systems? Will it do more for less than the present methods and why?
4. How can we effectively use present social rationale to point out the need for a PPBES or ERMS management tool?
5. What do you mean by product improvement? How are you going to get quality control and acceptable accountability?

At this point the group felt that the first commitment must be one of full and complete dedication and support from the chief executive of the school district. It will be imperative for the superintendent to

APPENDIX F

SOME ILLUSTRATIVE IMPLEMENTATION PLANS FOR PPBES

AASA - NASE PPBES Clinic

Dallas, Texas
October 26-30, 1970

LABORATORY REPORTS

on

IMPLEMENTING PPBES IN A SCHOOL SYSTEM
(over 20,000 enrollment)

REPORT OF GROUP 1

A. Committment of Top Management

1. Orientation of Board of Education and securing board support
2. Selection and Appointment of a key PPBES Staff Person
3. Establish Task Force selected from Board of Education, Administration, Staff and Lay Community
4. Orient Task Force

B. Task Force Reponsibilities

1. Evaluation of Existing System and Constraints
2. Determine Implementation Tasks
3. Develop Schedule for Implementation
4. Determine Process for each Implementation Phase (constituent or Target group involvement, staff training, etc.)
5. Identify staff and financial needs for Implementation
6. Review Tentative Implementation Plans with Appropriate Groups
7. Presentation of Proposed Implementation Plan to Administration

and activities must be shown. Cost relationships must also be projected. Presentation of the work of this group should be shown in an ERMS or PPBES structure. Final review and consideration must be made by the staff member and the chief executive before submission to the board of trustees for final approval. Completion schedules for segments of this assignment must also be determined and set.

The time frame for these assignements would be as follows:

1. Staff and board orientation by chief executive to consume approximately 3 months. During this time the prototype should be developed.

2. Task forces are to work and complete their assignment during an allowed six month period. It is possible that some work by the staff delegate on recruitment could be done during the last stages of orientation mentioned in item #1.

3. Planning, programming, budgeting and evaluation teams will be given three months to complete their assignement. Their recruitment and selection should be considered during the cyclying of the action in item #1.

4. Drafts of the proposed documents should be reviewed carefully by the project officer, corrected and presented to the Executive staff before submission to the board for final approval. (Approximately one month required.)

5. The target date for implementation was set for July 1, 1973.

6. As part of the planning a control group should be identified to provide one means of comparison for cost effectiveness and evaluation.

7. It is not the intent of this group to "stop" the operation of this increment at the end of the first year, but let it continue through the next fiscal year after recycling steps have been preformed. Some of this will be done continuously from the very beginning.

8. First formal evaluation report to be made prior to the beginning of the second year.

AASA - NASE PPBES Clinic

Atlanta, Georgia
January 18-22, 1971

LABORATORY REPORTS

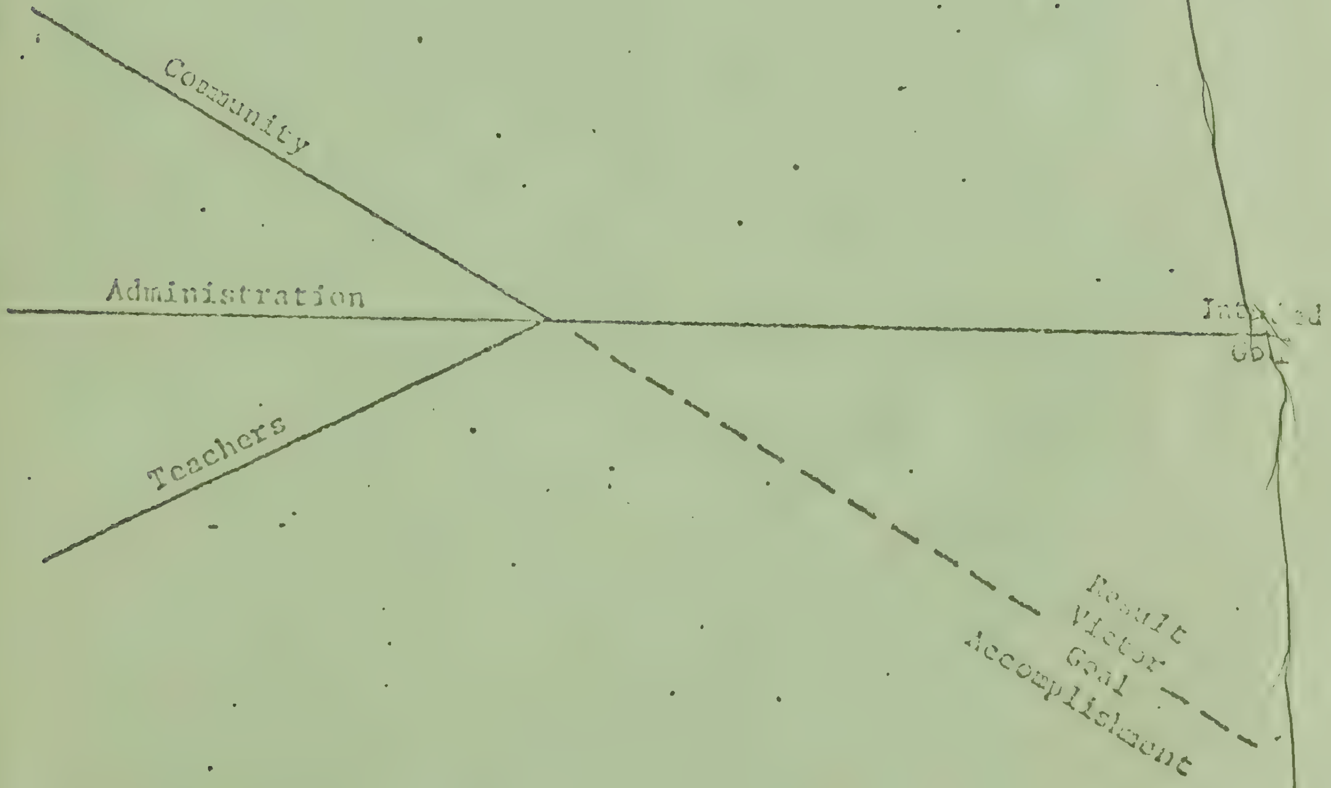
on

IMPLEMENTING PPBES IN A SCHOOL SYSTEM

REPORT OF GROUP A

Groups to be Considered:

- Community
    - Power Structure
    - Educational Supporters
    - Educational Critics
    - Others
- Board of Education
- Administration
- Professional Teaching Staff
- Para Professionals
- Classified Personnel



A. Commitment from Policy Making Group

1. Orientation of Leadership
2. Analysis of Groups to be Considered
3. Planning for Commitment
4. Orientation of Staff and Community
5. Communication Systems
6. Official Board Approval

B. Training for Understanding

1. To include Board, Administrative Staff, Faculty and Community

C. Analysis and Evaluation

1. To involve all elements of the program and all personnel involved in the program

D. Planning for Implementation

1. Set Goals
2. Acounting Procedures
3. Legal Involvements
4. Study problems, possible pitfalls, etc.

E. Traning for Implementation

1. To give thorough knowledge and procedures of PPBES to Board, Administrative Staff, Faculty and Community members involved in the program

F. Implementation of the Plan

1. Establish program and accounting structure of PPBES Plan

G. Evaluation and Analysis of the Plan

H Recycle from Item B, Training for Understanding to Item G, Evaluation and Analysis to increase sophistication and understanding of personnel involved in the plan. Continue as long as is necessary.

REPORT OF GROUP B

A. Approval of Board of Education to pursue PPBES idea

B. Board appoints Steering Committee:

Superintendent, Businessman, Business Administrator, State Department representative, Coordinator of the project, Board Member, University professor

C. In-Service Orientation Days scheduled for staff

D. Board appoints Planning Council on recommendation of Steering Committee and Coordinator:

Superintendent, Assistant Superintendent, Board Member, Coordinator, Business Administrator, Principal, Teacher

E. Planning Council establishes goals and schedule of a PPBES Development Plan (three year plan, first year set, tentative objectives for second and third years)

F. Planning Council and Coordinator identify a Program Structure of what exists

G. Appointment of Program Teams to develop:

1. Objectives
2. Evaluative Criteria
3. Description of present curriculum
4. Cost of present curriculum

H. Program Description Packages go to each school which requisitions personnel, supplies, equipment, etc. for each program -- this is called the Local School Program Resource Summary. Each school budgets its programs in traditional ways, simultaneously showing the budget by programs

REPORT OF GROUP C

A. Assumptions

1. PPBE is a tool to gain or to facilitate attainment of stated educational goals. It is not an end-in itself
2. Implementation should be viewed as a long term and continuing process

B. Commitment

To avoid still birth of the idea, commitment should become internalized in the district as rapidly as possible

1. Initial commitment of the education leadership: Superintendent and Board of Education
2. Development and Appointment of a task force including formal and informal leaders within the system
3. Establishing contact and involvement of external milieu of the school
    - (a) Relevant governmental agencies, e.g., town government, state groups for support and financing. These agencies can supply external pressure of continuance
    - (b) Local community formal groups
    - (c) Local community informal groups

C. Planning

1. Macro level planning - Responsibility of District PPBES Task Force
    - (a) Prepare approximate long-range time schedule
    - (b) Development (discovery) of existing program structure of the district
    - (c) Determination of the program leaders and groups
    - (d) Plan of dissemination of information to staff and community
2. Micro level planning - Responsibility of Program Leaders and Groups
    - (a) Program structure explication (existing)
    - (b) Determination of present goals and objectives
    - (c) Preparation of changes, if any, in goals, objectives, evaluative procedures

D. Implementation

1. Phasing in of program changes over longer time periods, three to five years
2. Whole-staff involvement in in-service training, phased to match implementation stage
3. Continuous, planned exchange between Task Force and:
    - (a) Staff
    - (b) Community
    - (c) Governmental Units where deemed necessary

E. Evaluation

1. Must be internal, i.e., each program of the district must include continuous self evaluation
2. Must be external, i.e., the utilization and implementation of the PPBE System must be periodically examined on a district-wide basis

REPORT OF GROUP D

Planning A. Identification of Affected Groups

1. Board of Education
2. Administration
3. Supervisors and Coordinators
4. Instructional Staff
5. Support Services
6. Student Body
7. Non-Instructional Staff
8. Community

B. Discuss need and/or advantages of implementing ERMS in the school district

C. Orientation and in-service training programs to familiarize groups with ERMS culminating a decision and/or commitment

D. Development of organization structure

Program A. Assessment of existing programs and identification of strengths, weaknesses and needs

B. Selection of an area to develop an ERMS model and a target date

C. Establish goals and performance objectives

D. Develop alternative

E. Design program structure

F. Selection of materials and equipment

Budget A. Develop crosswalks between segment of the function object budget to an ERMS budget

B. Retool budget procedures for transition to ERMS and establish a coding system

C. Develop a total long range program budget when staff is knowledgeable and select a target date

* Cost analysis would be difficult in a smaller district because of lack of personnel. This service is more likely to be contrasted. Smaller districts do not usually have access to sophisticated data collecting systems.

Evaluation A. Established procedures should be a continuous process

B. Develop procedures to evaluate ERMS systems

C. Develop procedures to evaluate program and performance objectives

D. Selection of and/or the development of evaluation materials and techniques